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Co-ordination of Research Policies
with the Western Balkan Countries



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Background Report on Social Sciences and Humanities Montenegro

Prepared for the project WBC-INCO.NET

Montenegro



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WBC-INCO.NET, an FP7 funded project running from 2008 to 2013 with a total of 29 project partners, aims at the enhancement of the integration of Western Balkan Countries in the European Research Area (ERA).

Its core objectives are to support the bi-regional dialogue on science and technology (S&T), to identify RTDI cooperation potentials and priorities for take-up in FP and other EU programmes, to enhance participation of WB researchers in EU projects, to analyse innovation needs and barriers in the WBC, to exchange information and best practices on innovation policies and to establish closer cooperation between research and innovation. WBC-INCO.NET is being coordinated by the Centre for Social Innovation, Austria.

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Executive Summary

The main goal of this document is to give an overview on scientific and research activities in social sciences and humanities in Montenegro. The document is created as the result of activities within WBC-INCO.NET project funded by the EU FP7, whose goal is to encourage and strengthen integration of Western Balkan Countries (WBC) into European Research Area (ERA). Among other fields it also covers social sciences and humanities (SSH), and aims to initiate mutual cooperation of WBC countries and establish connection between research communities in SSH field, to bring national and regional priorities in SSH development in accordance with European research agenda and to encourage active participation of WBC countries in relevant European projects of mutual interest.

The report is based on the data from different sources, mostly public document of different ministries, governmental bodies, research institutions and institutions from public and private sector, and MONSTAT, the national statistical office.

Challenges ahead of the SSH field in Montenegro are identified on the basis of strategic goals for scientific research activities (SRA) development given relevant documents of Montenegrin authorities in the area of science and research, but the author was also driven by recommendations given in the document "Montenegro in XXI century – in era of competitiveness" of the Montenegrin Academy of Sciences and Arts. Seven priorities stated at the end of document were also influenced by social innovation and the Activities of the EC 2012 Work Program for the Social Sciences and Humanities of the FP7 in order to provide the base for cooperation between WBC countries and easier obtaining and efficient allocation of FP7 funds. These priorities are related to the need to enhance economic growth and employment; build a competitive innovation and research oriented education system; develop knowledge society; improve the relationship between science and businesses; face demographic challenges and keep national identity and cultural uniqueness in the globalized world.

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1 Purpose of the national background report and methodology/summary of the consultation process

This Report is created as the result of activities within WBC-INCO.NET project funded by the EU FP7, whose goal is to encourage and strengthen integration of Western Balkan Countries (WBC) into European Research Area (ERA). Among other fields it also covers the field of social sciences and humanities (SSH). One of the goals of this project is to initiate mutual cooperation of WBC countries and establish connection between research communities in SSH field. It also should bring national and regional priorities in SSH development in accordance with European research agenda and encourage active participation of WBC countries in relevant European projects of mutual interest.

The report is based on the data from different sources, mostly public documents of different ministries, governmental bodies, research institutions and institutions from the public and private sector, and MONSTAT, the official national statistical bureau. The Author is very grateful to Ms. Milena Milonjic, from the Ministry of Science, Government of Montenegro, who was very helpful in providing data for this report. Work on this report has shown that Montenegro has rather poor statistics on scientific research activities (SRA) and this is one of the areas that need significant improvements.

Research priorities, stated in the document were defined in consultation with several researchers in SSH field in Montenegro and are based on the recommendation of the research team who worked on the project "Montenegro in XXI century – in era of competitiveness". This project was conducted by the Montenegrin Academy of Science and Arts. It provided a comprehensive document which was created as the result of Memorandum signed between the

Government of Montenegro and the Montenegrin Academy of Science and Arts whose goal was to define national strategic priorities in different areas. The project was organized into ten subprojects each of which had the goal to identify strategic directions for the development policy in different areas and give recommendations to the decision makers: Environment and Sustainable Development; Economic development; Integration into the European and Euro-Atlantic Structures; Building and Functioning of the State of Montenegro; Population Aspects; Energy; The Issues of Values; The cultural environment; Education; and Science and Technology. Authors of the subproject Science and Technology gave comprehensive analysis of Science Research Activities in Montenegro. They used the foresight methodology, which included the Delphi method for expert evaluation of the factors that affect the scientific research (SR) and the development research (DR) system in Montenegro. This determines the key directions of science and technology development in Montenegro. The results of this analysis were used in drafting this report.

The recommendations and priorities stated in this report were also influenced by social innovation and the Activities of the EC 2012 Work Program for the Social Sciences and Humanities of the FP7 in order to provide the base for cooperation between WBC countries and easier obtaining and efficient allocation of FP7 funds.

This report is prepared by dr Maja Drakic, who is assistant professor and the dean of the Faculty for International Economics, Finance and Business, University Donja Gorica – UDG; and senior analyst at the Institute for Strategic Studies and Prognoses.

2 The SSH S&T system in Montenegro

2.1 The Montenegrin policy framework

2.1.1 The overall SSH policy framework

Scientific research activity in Montenegro is legally determined by:

1. The Constitution of Montenegro;
2. Law on Scientific Research Activity from 2005. New Law on Scientific Research Activity is adopted in 2011;
3. Law on Higher Education adopted in 2004. Changes in the Law on Higher education are adopted by Parliament of Montenegro in 2010.
4. Law on Montenegrin Academy of Sciences and Arts from 1994.
5. Several subordinate acts and rulebooks such as The Strategy on Scientific Research Activities of Montenegro (2008-2016), adopted in 2008 by the Government of Montenegro; Strategy of Financing and Development of High Education in Montenegro (2011-2020)

The Constitution of Montenegro, in Chapter "Schooling" guarantees the autonomy of universities, higher education and scientific institutions, and in Chapter "Freedom of Creativity" it guarantees "the freedom of scientific and cultural creativity, as well as freedom of publishing of scien-

tific and cultural work, scientific and technical inventions and moral and property rights of their creators".

The chapter "Science, Culture and Arts" stipulates that "the state fosters and supports development of education, science, culture, arts, sports, physical and technical culture. The state protects scientific, cultural, artistic and historical values."

The Law on Scientific Research Activity regulates the organization, conditions and models of financing scientific research activity and other issues relevant to carrying it out.

The Law defines scientific research activity as the activity of public interest, which is free and accessible to all domestic and foreign physical and legal persons.

Main principles of scientific and research activity are defined in the Law:

1. Widening and deepening of scientific knowledge

2. Development of science with a view of increased effectiveness, protection and development of the general knowledge base;
3. Increased effectiveness of the scientific research activity and networking of organizations in the field of science, education and business;
4. Integration into the European Research Area and Framework Programs of the European Union for research and development, and other international programs;
5. Involvement in regional cooperation programs in the field of scientific research activity;
6. Freedom and autonomy of scientific work which needs to be independent, morally and intellectually, from every political authority and economic power and which is performed with respect of ethical standards and principles of scientific truth and critical thinking;
7. Ethics and responsibility of persons performing scientific research work for the consequences of their work;
8. Education of high profile experts for research and development;
9. Sustainable development and enhancement of the environment;
10. Protection of person and dignity of individuals who perform scientific research work;
11. International quality criteria; and
12. Networking of persons performing scientific research work at the national and international level.

The Law also defines the types of research, the type of research, realization and supervision of scientific research activity. Strategy of scientific and research activity is institutionalized through legal provisions in the Law. The Law further refers to the program of public interests, procedures for research and scientific programs and projects, as well as the activities aimed to stimulate scientific research activity. The Law established the institution of the Council for Scientific Research Activity and clearly defined the procedure and requirements necessary for licensing scientific research institutions. It also defines the difference between public and private scientific research institutions and establishes the criteria for research and scientific ranks. The Law contains provisions on the Centers for Excellence. Besides, it defines procedure for financing science and research activities.

The Law on Higher Education regulates the fundamentals of higher education, conditions for carrying out activities, type of programs and criteria to found and organize high education institutions. The area of science and research is regulated by this Law. Thus, among others, the goals of higher education are "setting up, improvement and development of knowledge, science, arts and culture" and "transfer of general, scientific and professional knowledge and skills through teaching process and research". This Law treats several aspects of research and science activity through provisions which refer to research activity at universities and other higher education institutions.

The Law on Montenegrin Academy of Sciences and Arts – CANU regulates activities, organization and work of this higher education institution within the scientific and artistic area in Montenegro. According to the Law, the Montenegrin Academy of Sciences and Arts is the supreme institution in the field of sciences and arts in the Republic of Montenegro. CANU strives for freedom of scientific and

artistic creativity. This institution organizes, initiates and implements scientific research, by itself or in cooperation with other scientific institutions; organizes, by itself or in cooperation with others, scientific meetings, symposia, scientific speakers' platforms, scientific debates, consultations and exhibitions; renders assistance to individual scientific and artistic work of its members and scientific and artistic work in other institutions; takes part in establishing the program of scientific and artistic significance at the national level; assists in training and specialization of young scientists and artists; issues publications in the field of science and arts; makes incentives and cherishes scientific and artistic critique; collects, arranges and studies scientific materials in the field of science and arts; participates, as needed, in assessment of the results of scientific and artistic creativity; makes initiatives, proposals and opinions to state authorities and other holders of economic, cultural and public life aimed at the improvement of conditions for scientific work and artistic creativity; cooperates with scientific, cultural, economic and professional organizations and institutions in the country and abroad. CANU also gives proposals and opinions to national authorities and other interested parties from economic, cultural and public life aiming to provide conditions for scientific work and artistic creativity, improvement of science organization and give recommendation to solve current and long-term problems of social development.

The Ministry of Education and Science was the national authority responsible for scientific and research activity in Montenegro, but from December 2010 the Government of Montenegro established an independent Ministry of Science. Among other activities, the Ministry of Science defines scientific policy and strategy, gives proposals and implements laws and other regulations of scientific and research activity, which means it supervises scientific and research institutions. The Ministry supports the development of scientific and research activities. It also fosters the development of science, innovations and encourages implementation of scientific achievements in the business and practice, promotes the development of technology. This Ministry is responsible to establish and maintain the system of financing scientific and research activities, but also to provide technical assistance to the Council for Scientific and Research activity.

Besides the Ministry, the Government of Montenegro also has the Department/Agency for International Scientific and Technical Cooperation (ZAMTES). In this department, different programs and projects related to the scientific and technical cooperation are being prepared, coordinated and realized. The Agency participates in making both bilateral and multilateral programs and in that respect various international gatherings are being organized. Based on the signed agreements, scientific, research and development projects are being realized in the Republic. The human resources are being prepared for professional development abroad according to this multilateral and bilateral programs and international seminars, conferences and gatherings are being organized as well. The role of ZAMTES can change due to the new organization of Government, as Ministry of Science is independent Ministry since 2010, but it doesn't have to happen, as traditionally ZAMTES coordinates international education programs and is widely known in public by that activity.

The Council for Scientific and Research activity is appointed by the Government according to the Law on Scientific and Research Activities. The role of this body is to implement the policy of enhancing scientific and research activity. The Council analyses the status and achievements in the scientific research activity, gives expert suggestions and in that view it has the special authority of:

1. Preparing and proposing of the Strategy
2. Proposing the priorities from the Strategy and programs of public interest for the actual year
3. Giving opinion on the criteria for election into research and scientific ranks
4. Giving opinion on laws and other regulations in the area of scientific research activity and other areas, which ensure general conditions for the stimulation of scientific research activity and exploitation of its results

5. Giving opinion in the process of determining the levels of financing of priorities determined in the Strategy
6. Proposing to the Ministry the decision about assigning the status of a Centre of Excellence
7. Monitoring the realization of the Strategy
8. Nominating the committees for the realization and monitoring of the activities defined by the Strategy, as well as for the quality control of the scientific research activity
9. Cooperating with the Council for Higher Education; and
10. Performing other tasks prescribed by this law and the act on the establishment of the Council.

The Council for Higher Education is an institution established through the provisions of the Law on higher education. Activities of this body influence the research component of university and other high-education institutions.

2.1.2 The elements of SSH research policy making

The Government adopted the Strategy of Scientific Research Activities for the period of eight years (from 2008 to 2016) in July 2008. The Strategy defines priorities, and the means of promoting and monitoring scientific and research activities in Montenegro.

One can speak about the success of science in a country and the meeting of general development needs only if its interconnection with education (human resources development) and economy (economic development) is considered. The basic objective of the Strategy for Scientific Research Activities is to stimulate development of science and technology by connecting these factors, and to increase their contribution to development of the society, with the largest possible application of new knowledge and creation of proper knowledge and technologies. In order to achieve this objective, the following aims, analyzed within this Strategy, were set:

1. Emphasize the importance of science and research in the context of further social-economic development and transformation into a modern society based on knowledge,
2. Provide to the Government of Montenegro an expert framework, recommendations and support for concrete activities undertaken so as to improve and create conditions for dealing with scientific-research activities and indicate to the competent ministries the necessity and legitimacy of investment into scientific-research work,
3. Encourage allocation of funds for investment into science and scientific infrastructure in compliance with the recommendations of the Lisbon strategy and propose an adequate dynamics of allocation in relation to the GDP,
4. Emphasize the irreplaceable role and decisive importance of human potential for development of science and technology, primarily through development of young staff and inclusion into the European Research Area - ERA,
5. Stimulate technological development and innovation and draw attention of economic entities to the fact that their market success depends on the acquisition and use of new and better knowledge, successful applica-

tion and promotion of scientific results and development of new technologies whose products are attractive for the market,

6. Give recommendations for optimization and possible reorganization of the institutional framework for implementation of scientific-research activity in view of more efficient action,
7. Stress the importance of the system for scientific informing and the role of information-communication technologies (ICT),
8. Stress the importance of favorable legal measures establishment (tax policy measures) and of adoption of adequate regulation (e.g. for intellectual property protection),
9. Identify the most important areas of scientific-research work, bearing in mind the natural, technological and human resources comparative advantages of Montenegro,
10. Through an adequate action plan define priority areas and activities as well as methods for monitoring realization of adopted tasks.

One of the basic reasons for developing the Strategy for Scientific Research Activities is pointing out to the strategic importance of scientific-research activities as the basic engine of economic and general social development. This is especially important in the conditions when the society, such as ours, still does not recognize the importance and role of science and technological development in achievement of new values, and the academic community suffers from lack of motivation and information, psychological barriers for inclusion into programs of mobility and inadequate valorization of the results of its own work.

According to the Strategy, two approaches to selection of priority areas of scientific-research work can be observed by analyzing the scientific-research activities strategies of European countries. Certain states have defined particular areas as thematic priorities having in mind their comparative advantages and conditions for achieving a leading role in those areas of research, such as for example biotechnology, genetics, medicine, information technologies, food, environment protection, energy, new materials etc.

The other approach implies allocation of resources for particular activities i.e. programs (functional priorities) such as: scientific-research process at universities, the connection between the university and the economy, inclusion of economy into scientific-research process, development of new technologies, technological infrastructure, business competitiveness and the like, with technological areas not being specified in particular. It is thought that full support should be given to all areas for which there is interest, adequate conditions and readiness of the economy for investment into scientific-research processes, notwithstanding the technological area.

The above approaches can be recognized in parallel in many strategies, with one or the other having a predominant role.

When selecting thematic priority areas of scientific-research work in Montenegro, special attention should be paid to meeting the following conditions to the maximum:

- Increase of the domestic product in Montenegro;
- Harmonization with the strategic documents of Montenegro; the National Strategy for Sustainable Development, the Physical Plan, Development directions of Montenegro as an Ecological State, Energy Development Strategy etc., as well as the existing laws in the area of higher education and scientific-research activity;
- The possibility to join international projects with the existing scientific-research potential (staff and equipment), i.e. affirmation of research in the areas which can be competitive at the European level;
- Creation of conditions for further development of scientific-research staff and institutions in particular areas;
- Preservation of the natural and cultural heritage.

The Strategy defines thematic priorities in particular areas such as:

- Science and education

The strategic documents of Montenegro, point out that science and education are prerequisites for sustainable development and that they should be among the top priorities of the national policy and strategy of social, economic and scientific-technological and cultural development of Montenegro. Progress of science implies recognition of the best quality researchers, promotion of scientific activities and ensuring of a connection between science and education.

Montenegrin society, just like every other society in transition, faces a number of specific problems which are to be permanently studied in order to reduce their negative effects. The natural and cultural heritage, demographic structure, national identity, language and the like, are areas which should be devoted special attention to.

- Ecology

Montenegro declared itself an ecological state, which is in line with its strategic documents and those of almost all the countries in Europe, in which sustainability is the key term, and clean and unpolluted air, water and land are the basic priorities of development policy. The sea and the coastal zone have special importance as they represent a significant resource in the Mediterranean countries and

therefore activities aimed at studying and implementing measures of protection and rational use of biological resources have a priority place.

- Tourism

Work in the area of tourism implies research in a range of areas on which this branch of economy predominantly depends, such as environment protection, water supply system, waste waters, transport, communications etc.

- Agriculture

Development of a sustainable sector of agriculture and food production on the whole is of fundamental importance for the overall economic development of Montenegro, bearing in mind the fact that food production contributes more than 1/5 of GDP. The modern concept of sustainable development puts agriculture into a much wider context, because the overall importance is reflected in its multi-functionality. Development of agriculture at the same time means also management of huge resources (37% of the total territory of Montenegro). The modern concept of agriculture development and agrarian policy observe development of agriculture and village areas in their integrity. Such integral approach includes also forestry, as an important segment of natural resources management. In view of an extremely strong competition and a number of subsidies given by the countries in the region for agricultural production, Montenegro can be competitive with a relatively small number of agricultural products, but there is significant potential when the production of healthy-organic food is in question.

- Health of population

Due attention should be paid to health problems typical for particular population categories of Montenegro.

- Energy

Research in the field of energy should primarily be directed to research of energy potential, renewable energy sources typical for Montenegro, as well as for improvement of energy efficiency, having in mind that in this field we are among the last in Europe.

The above mentioned topical areas should be taken into consideration when annual investments of budget funds are planned, over competent ministries, for program co-financing of adequate scientific-research institutions and realization of capital development projects in the mentioned areas with the maximum engagement of domestic scientific staff. In cooperation with the Ministry for Economic Development additional support of the banking sector needs to be secured for the realization of scientific-development projects and stimulating conditions be created for foreign investments into research and development.

Ministry of Science, and before Ministry of Education and Science as the ministry responsible to provide funds for realization of scientific-research projects, which are allocated on a competitive basis, has not faced significant problems of the establishment of thematic priorities to which the budget funds are to be directed, because the intensity of scientific-research work is not on a high level.

The Strategy identifies the problem of disproportionate representation of various fields of science in project pro-

posals, which arises in the distribution of annual funds for science, and therefore in order to develop equally all fields of science it is necessary to determine their mutual relationship in the distribution of funds for fundamental research. The Strategy of Science Research Activities says that one of the models, which could be implemented in Montenegro, is represented in the European Research System in the Framework Programs:

Natural-Mathematical Sciences and Engineering – around 40%

- Life Sciences – around 35%
- Social Sciences and Humanities – around 15%
- Multidisciplinary research – around 10%

Bearing in mind the above quoted criteria, priorities can be established among the good quality applied and development projects which apply for budget funds. At the moment when the problem arises of too big a number of very good quality applied and development projects in various fields of sciences, the Ministry of Science (or the competent Agency) should conduct national prioritization according to the well known methodologies (Prediction in science and other).

The Strategy suggest that the competent Ministry should make the so called functional prioritization, i.e. to define priority policies and measures intended for removal of barriers and deficiencies in the research system and stimulation of its growth.

These are policies such as: stimulation of public-private partnerships in research, establishment of a balance between various sources of research activity financing, improvement of conditions for attracting foreign investments into research and development, increase in the number of secondary school graduates who enter the engineering studies.

In the period of Strategy implementation 2008-2016, according to the recommendations stated in this document, priority functional areas of scientific-research activity, which the measures from the annual work programs of the competent Ministry should be directed to, are as follows:

- Implementation of measures for building the human resources potential for scientific-research activity, through program stimulation of increase in the number of researchers and better conditions for work;
- Research infrastructure enhancement through regu-

lar investments of budget funds into modernization of existing capacities, their augmentation and an open approach;

- Application of measures for connecting the research sector with economy by means of joint development projects;
- Increase of investments into research in the sector of economy.

The Strategy for financing and development of higher education in Montenegro 2011-2020, adopted this year (2011) starts from the fact that scientific and research work is not present at the universities as much as it should be. Thus, the purpose of this Strategy is to develop an efficient, high-quality system of higher education and research which will promote social and economic development of the Montenegrin society, as a society of equal opportunities for each individual, based on the principles of freedom and democracy. This can be achieved through several goals, one of which is development of research oriented higher education.

This goal will be achieved through:

1. Intensified research component in process of acquiring knowledge at all higher education institutions (improving research infrastructure, more research activities in curricula, encouraging research work among teaching staff, intensified cooperation of universities with companies and independent research centers);
2. Internationalization of research (using EU funds like the Instrument for Pre-Accession (IPA) to develop PhD studies, participation in European and regional scientific research programs, attending programs which provide financial support to researchers);
3. Identification of Montenegrin research Diaspora (Montenegrin researchers who are successful abroad) and linking them to home country (involvement in domestic research programs, provide convenient conditions for descendants of Montenegrin emigrants to study at Montenegrin universities, promoting programs through which Montenegrin emigrants financially support our students);
4. Engaging young people in the research activities (providing financial funds to support young researchers and students organization which are active in the scientific research area, tax exemptions for scientific research activities and organization, developing programs of media promotion of young research, financial support for researchers books and literature).

2.2 Overview of SSH research activities

Comparative analysis of data on the number of researchers (head count and full time equivalent) and number of students on all level of studies (undergraduate, postgraduate and doctoral students) in social sciences and humanities and natural sciences in Montenegro, show the dominance of SSH. However, these numbers can deceive us, as there is strong need to improve scientific research activities in SSH and natural sciences. Comparing the data from the table given below on the number of scientific research projects in area of natural and social sciences

and humanities financed by relevant Ministry (Ministry of Education and Science, now Ministry of Science), we can see that many more projects from natural and mathematical sciences are financed from governmental funds in the period 2000-2009. The relevant Ministry of Education and Science financed a total number of 91 projects in natural and mathematical sciences and 62 projects in social sciences and humanities in this period. In the period 2004-2007 two SSH projects were realized within the agreement on bilateral cooperation with Slovenia¹

1. This project also included 4 projects in the field of natural and mathematical sciences.

Table 1: Number of scientific research projects financed by relevant Ministry 2000-2009

Field of Science	2000	2005	2007	2008	2009
Natural and Mathematical Sciences	26	21	4	20	20
Social Sciences and Humanities	29	6	1	14	12

Source: Ministry of (Education and) Science on request for project of Montenegrin Academy of Sciences and Arts „Montenegro in 21st century – in era of competitiveness“

Due to the incompatible methodology, most of the data on financing scientific research activities and the structure of research community in Montenegro are not compatible with EU statistics. However, analysis of this data can bring us to certain conclusions.

Mostly, funds for financing scientific research activities in Montenegro are provided from state budget. Statistical data on investments of companies in SRA are not available, inadequately systemized, or not reliable. If we make detailed analysis it is evident that the state has to increase investments in SRA in order to bring the level of science research infrastructure and human resources on EU level and especially to the level which is promoted in EU strategic documents. The goal promoted in the strategic document of the Montenegrin Academy of Science and Arts² is to achieve the following structure: - 60% state (budget), 30% business sector and 10% from external sources, primarily EU funds.

There is no available and reliable data on investments into SRA in Montenegro in EUROSTAT or relevant EU documents as the statistical methodology used by MONSTAT is not compatible with EU standards. Thus MONSTAT and Ministry of Science are working on harmonizing this methodology. Unlike EU countries, which have classified data on the structure of GBAORD (government budget appropriations or outlays for research and development) by socio-economic goals and by fields of SRA, these data are not available for Montenegro. Only data on financing research and development in the area of higher education are available. According to the data of relevant Ministry GBAORD in the period 2001-2009 ranged from 0.032% to 0.087% GDP (see table below):

Year	Expenditures of Ministry of (Education and) Science on Research projects, €	GBAORD ³ (%GDP-a)
2001	922.200,00	0,0879%
2002	1.020.080,00	0,0835%
2003	1.121.836,00	0,0816%
2004	1.224.210,00	0,0830%
2005	722.000,00	0,0427%
2006	600.000,00	0,0328%
2007	900.000,00	0,0395%
2008	1.670.000,00	0,0500%
2009	1.609.000,00	0,0435%

Source: Ministry of (Education and) Science on request for project of Montenegrin Academy of Sciences and Arts „Montenegro in 21st century – in era of competitiveness“

Another relevant indicator on financing is GERD (Research and development expenditure; gross domestic expenditure on research and development – GERD). This indicator expresses the intensity of SRA and is also usually given as the percentage of GDP. One of the goals of the Lisbon Agenda is to reach the level of 3% GDP in gross domestic expenditure on R&D, with 2/3 of that amounts from business sources.

Table 3: GERD in Montenegro as percentage of GDP

Year	GERD (%GDP-a)
2001	0.513
2002	0.121
2003	0.089
2004	0.180
2005	0.162
2006	0.040
2007	0.141
2008	0.095

Source: Subproject „Science and Technology“, „Montenegro in 21st century – in era of competitiveness“, Montenegrin Academy of Sciences and Arts. Indirect calculation based on the data on non-material investments (source MONSTAT)

Unlike other countries Montenegro does not have available data on the structure of GERD (total, business sources, government, and structure by fields of study). The statistical methodology in Montenegro is not harmonized with the Decree of European Commission on statistical methodology in science and research (Commission Regulation 753/2004). Statistical Office of Montenegro – MONSTAT shows that GERD in Montenegro was between 0,04% and 0,51% of GDP in the last 10 years.

Table 4 show the structure of Ministry of (Education and) Science expenditures on scientific research projects, including equipment, programs of professional development of researchers and international cooperation programs in the period 2005-2009.

2. Indicator calculated as the share of funds allocated in SRA by relevant Ministry in GDP.

3. Indicator calculated as the share of funds allocated in SRA by relevant Ministry in GDP.

Table 4: Structure of Ministry (of Education and) Science Expenditures in the period 2005-2009

Year	Total in €	Scientific research projects (including equipment)	Professional development	International cooperation
2005	722 000	47,00%	46,40%	6,60%
2006	600 000	57,16%	27,67%	15,17%
2007	900 000	57,78%	22,00%	20,22%
2008	1 670 000	69,14%	17,25%	13,61%
2009	1 609 000	68,40%	13,57%	18,03%

Source: Subproject „Science and Technology“, „Montenegro in 21st century – in era of competitiveness“, Montenegrin Academy of Sciences and Arts.

As the statistical methodology on SRA in Montenegro is not compatible with EUROSTAT's methodology yet, it is very complicated to give objective appraisal of the position of Montenegro in the scientific research area. After the reform of the statistical methodology and data on GBAORD, GERD, number of researchers (head count and full time equivalent) will be comparable and enable us to determine the position of our scientific research system in the European environment. However, available data show that

Montenegro necessarily needs to increase investment in SRA, which is defined in Strategy for SRA 2008-2016. The Strategy provides a proposal of the dynamics of growth of investments into SRA by 2013. However the goal for the year of 2009 is not reached. Ministry of Science and the Council for SRA have the plan to redefine strategic documents, but also invest lot of efforts in order to increase investments in SRA.

Table 4: Proposed dynamics of growth of investment in SRA (as % of GDP)

Year	2006	2009	2010	2011	2012	2013
Government sources	0.03%	0.1%	0.2%	0.2%	0.3%	0.6%
Business Sources	0.01%	0.3%	0.6%	0.8%	0.9%	0.8%
TOTAL:	0.04%	0.4%	0.8%	1%	1.2%	1.4%

Source: Strategy for Scientific Research Activities in Montenegro 2008-2016, Ministry of Education and Science, Government of Montenegro

2.2.1 SSH research projects

Ministry of Science is financing 12 research projects in social sciences and humanities, which are currently underway. Most of these projects are in the field of historical research with the goal to keep cultural inheritance and uniqueness of Montenegro, some of them deal with language and literature, political science or economic issues. The call for these projects was announced by Ministry of Education and Science in 2008, when 14 projects have got the funds within National Program. In the meantime the work on two projects has been suspended.

In 2009 and 2010 Montenegrin Academy of Sciences and Arts CANU has realized the project "Montenegro in XXI century – in the Era of Competitiveness".⁴ The goal of the project was broadly defined as the development of many areas of Montenegrin society and it can be considered as a project in the field of Social Sciences and Humanities. It provided a comprehensive document which was created as the result of Memorandum signed between the Government of Montenegro and Montenegrin Academy of Science and Arts whose goal was to define national strategic priorities in different areas. The project was organized into ten subprojects each of which had the goal to identify strategic directions for the development policy in different areas and give recommendations to the decision makers: Environment and Sustainable Development; Economic development; Integration into the European and Euro-

Atlantic Structures; Building and Functioning of the State of Montenegro; Population Aspects; Energy; The Issues of Values; The cultural environment; Education; and Science and Technology.

Several projects in SSH field are realized by private institutions. The most important of them which are realized on continuous base are:

1. Macroeconomic Model for Montenegro, developed by Institute for Strategic Studies and Prognoses from Podgorica. ISSP has created Macroeconomic Model in four cycles (2005, 2006, 2008, 2010). Central Bank of Montenegro financed two cycles of this project in 2005 and 2007, Securities and Exchange Commission in 2008 and 2010.
2. International Economic Journal "Entrepreneurial Economy" (ISSN: 1451-6659) is published by Foundation of Postgraduate Studies "Entrepreneurial Economy" of Faculty for International Economics, Finance and Business, University UDG. The Journal is published from 2002. Seventeenth Volume was published this year. At the moment it is only international scientific journal published in Montenegro in English. The Journal is available in EBSCO databases. It is being financed from private sources – by the Foundation of Postgraduate Studies "Entrepreneurial Economy", Faculty for International Economics, Finance and Business and University UDG.

4. http://www.canu.org.me/cms/novosti/op%C5%A1te_novosti/crna_gora_u_xxi_stolje%C4%87u_-_u_eri_kompetitivnosti_20101012442/

2.2.2 Key competencies in SSH research fields

Highly qualified personnel in science and technology are a prerequisite of economic development and society as a whole. Satisfying number of researchers (according to desired goals), mobility and innovation capacity, and shaping research and innovation systems of the country are an important goals to participate in the international scientific research activities. An overview of human resources in the EU and Montenegro shows that Montenegro has about 2.5 times fewer people educated on tertiary level in the appropriate population and about 4 times fewer researchers per 1,000 employees.

The share of inhabitants with tertiary education in the population within the 25-34 age group is 9.5% (EU 27 average 22.5%). There are around 23,000 students in Montenegro, out of which 20,500 are undergraduate students (BSc degree), 2,200 postgraduate students (specialization and master degree). The structure of students in Montenegro by the field of study is as follows:

- Economics – 25%
- Law – 20%;
- Philosophy (including language studies) – 12%;
- Tourism – 8%;
- Information communication technology and computer science – 7%;
- Maritime studies – 5%;
- Political Sciences – 4%;
- Natural and mathematical Science – 3%;
- Engineering sciences (all types) – 6%.

There are around 300 students in Montenegro at PhD studies, out of which 40% study social sciences, 37% medical, 15% engineering and 4% natural sciences. There are no postdoctoral study programs.

According to MONSTAT data for 2009, 1,512 people worked in science research institutions. The total number of researchers was 781. However, we don't have exact number of FTE researchers for 2009, as MONSTAT methodology is not compatible with EUROSTAT⁵.

The same figure for 2008 is 1,462, which is 0.88% of total employment. There were 766 researchers which is 0.46% of total employment. Most of them are employed at universities - 679, while 42 researchers work in institutes and 45 in development units. If we apply EU methodology to the data on research staff, there are 313 FTE researchers or 1.8 FTE researchers per 1,000 employees, or 0.44 FTE researchers per 1,000 inhabitants. If we look at the structure of research staff by the field of study then the number of researchers is as follows:

- Natural sciences – total 76 (FTE-39),
- Social sciences – total 168 (FTE-56),
- Humanities – total 237 (FTE-105);

At the moment the research community in Montenegro consist of 3 universities (one state and two private universities) whose units (faculties) are registered as research institutions. In total there are 40 research scientific institutions – 29 university units, 2 independent faculties, and 9 independent research institutions. Out of total number of 40 research institutions 13 are private research institutions, and two of them are organized by companies (both in natural sciences).

In a nutshell data show that the number of people who study SSH and researchers in this field dominates however that can deceive us. The area of SSH needs further development, although the scientific community puts emphasis on the development of other fields of science: natural science, mathematics, and engineering.

2.2.3 SSH research infrastructure

At the moment there are 10 public institutions which are conducting research in field of SSH:

1. Montenegrin Academy of Science and Arts (CANU).⁶ CANU has the Department for Natural Sciences (with 10 committees), Department for Social Sciences (with 9 committees) and Department of Arts (with 6 committees).
2. The Historian Institute of Montenegro, University of Montenegro
3. The Institute of Foreign Languages, University of Montenegro
4. The Institute for Montenegrin Language and Literature
5. Faculty of Economics, University of Montenegro
6. Faculty for Sport and Physical Education, University of Montenegro
7. Faculty of Philosophy, University of Montenegro
8. Faculty of Law, University of Montenegro
9. Faculty of Political Science, University of Montenegro
10. Faculty for Tourism and Hotel Management, University of Montenegro

Nine private institutions are performing research in SSH:

1. Faculty for International Economics, Finance and Business, University Donja Gorica (UDG)
2. Faculty of Law, University Donja Gorica (UDG)
3. Institute for Strategic Studies and Prognoses
4. Center for Entrepreneurship and Economic Development
5. Montenegro Business School, University Mediterranean
6. Faculty of Law, University Mediterranean
7. Montenegro Tourism School, University Mediterranean
8. Faculty for Foreign Languages, University Mediterranean
9. Faculty for Transport and Communication Management

The main institution responsible for financing SRA is the Ministry of Science (before 2010 it was Ministry of Education and Science). Based on the Law on Scientific Research Activity, the Ministry of (Education and) Science announces calls for financing scientific and research projects. The calls were announced in 2000, 2005, 2007, 2008 and 2011 (the last call is still underway). The Ministry finances

5. This number is estimated on 324 if we keep the relation head count/FTE unchanged from 2008.

6. Montenegrin Academy of Science and Arts (CANU) is the supreme institution in the field of sciences and arts in the Republic of Montenegro. Its activities and role are regulated by The Law on Montenegrin Academy of Sciences and Arts. It is an institution funded directly from Government budget and it realizes projects in the all fields of science and arts. Those projects are usually realized within the institution (CANU)

projects in all fields of research:

- Natural science and mathematics;
- Technical and technological;
- Biotechnological;
- Medical;
- Social sciences and humanities;
- Interdisciplinary projects.

Once a year the Ministry announces a call regarding professional development of researchers in the country and abroad namely for:

- Stimulating researchers – project coordinators for submitting applications to FP7;
- Scholarships at postgraduate studies; PhD studies; submission, assessment and defense of PhD dissertations; technical processing of PhD dissertations;
- Participation of researchers in scientific congresses abroad and organizing scientific congresses in Montenegro;
- CEEPUS program and other mobility program of university professors, researchers and students.

The Ministry is also co-financing the procurement of capital (value over 20.000€), medium and small (value under 20.000€) scientific and research equipment in those insti-

tutions which have human resources qualified to use and utilize the equipment.

Due to its nature, research in Social Sciences and Humanities does not require large physical infrastructure. However the most important infrastructure is located at three Montenegrin Universities and their libraries. Beside University of Montenegro, infrastructure and libraries of two private universities must be mentioned, especially the new building of the University Donja Gorica, and new premises of the University Mediterranean which are still not completely finished.

The Montenegrin Academy of Sciences and arts is in process of constructing a new, modern building – those premises will also be a very important physical infrastructure having in mind the rich library fund of this institution.

Two private independent research institutions (ISSP and CEED) also have modern infrastructure in the area of SSH research, which is not very common occurrence if we know that these institutions usually finance their research from private funds.

2.3 Key drivers of SSH research

2.3.1 Main SSH sector trends in Montenegro

When speaking about dominant trends in the SSH sector we must not forget key megatrends of social development in the new millennium:

- Change of energy paradigm and the replacement of oil as energy source with alternative sources. This will bring changes in the economy and society overall.
- The economy will be increasingly established on innovations, demanding a “free spirit, free market, free entrepreneurship”, which raises importance of the investments in people, technologies, ideas, strategic cooperation, products and services necessary for an innovation economy.
- Demographic changes bring change in the structure of the work force. It further means that Montenegro has to keep talented people in Montenegro.
- Extension of human life and ageing of the population face the society with new challenges.
- Challenges of globalization and market mechanism threaten to *unite in this century a market order in the global market that will impact on the forms of many public services, democracy and the current form of state and nation.*

Climate changes, global security, the increasingly greater role of the individual, as well as geopolitical changes, require more than ever continued research into the vision of development of Montenegro, as well as the elaboration of strategies through which that vision is achieved. The changes are rapid and under their influence all existing institutional structures need to be reexamined. How to turn each individual, each company, towards changes? In addition to the problem of the functioning of institutions, that is another crucial problem of the economic development of Montenegro.

These are all issues that will affect trends in the SSH area.

In light of Montenegro’s future as part of the EU, we can identify several trends in the SSH sector, which dominantly influence strategic priorities in this area. Montenegro has the status of being candidate country and Montenegro’s Government is waiting for European Commission’s assessment of improvement in priority reform areas which are necessary in order to get the date of the start of negotiations on accession. Undoubtedly, R&D priorities in the field of SSH (and not only this field), which are in line with national policy priorities defined in the Government’s strategic documents will be focused on economic growth and employment, keeping national identity in future probably borderless environment, keeping cultural identity and uniqueness in the globalized economy, building a competitive education system, facing the challenge of demographic changes and last, but not the least – promoting innovation, research and entrepreneurship.

Trends in SSH in Montenegro would be as follows:

1. Development of the knowledge society – promoting innovation and research in all areas – in SSH as well;
2. Strengthening the relationship between science and businesses – this is very important and it should move the structure of GERD in the desired direction. With this respect it is also evident that promotion of entrepreneurship and innovation is one of the dominant features of SSH;
3. Fostering economic growth and employment – SRA should contribute to the economic development;
4. Face demographic challenges – as demographic changes are one of the key challenges the world is facing;
5. Keeping national identity and cultural uniqueness in a globalized world – SRA in SSH field must be oriented in this direction;
6. Building competitive innovation and research oriented education system – even though large share of stu-

dents attend study programs in SSH, these programs will strengthen its research component in order to survive and be competitive in the EU and on the global market.

2.3.2 Main socio-economic challenges in Montenegro

The main national development policy priorities are defined in the document „Montenegro in 21st century – in era of competitiveness“, which was created as the result of cooperation between Government of Montenegro and the supreme scientific and research institution in Montenegro – Montenegrin Academy of Science and Arts.

The document says: „In order to acquire the status of a developed, dynamic and modern state, and to respond to the challenges of the Millennium Development Goals, each element of Montenegro’s development should rely on knowledge, especially scientific, technological and innovative. Progress arising from such knowledge is unavoidable for any nation and state. More than any other power, science has determined the destiny of the mankind in the last two centuries. It has become a key factor of sustainable development. It has created welfare through excellence. Therefore, it is necessary to promote and stimulate excellence in the domain of science, engineering and technologies, aimed at the development of the state, as well as the benefit of mankind overall. Science will most frequently provide the best solutions for the most complex problems our country will face on its future developmental path.

Numerous are challenges we are faced with, such as sustainable development, population growth, economic growth, differences in the level of mankind development, health care, education, climate change, providing sufficient quantities of energy, the agricultural industry and many yet unknown, even with the question of our very survival. The answer to these questions may only be sought within both, the existing and new knowledge which has become the most important resource of contemporary world. In order to solve successfully these problems, both at the global and state levels, efforts will be necessary that would imply development, management and application of relevant knowledge.

In Montenegro, the role and importance of knowledge has not yet been recognized for its development. Some other options, such as political engagement, are far more valued. In addition, domestic knowledge, and experience – their values and capabilities have been underestimated and in a number of cases they have been replaced by foreign knowledge, this latter often being at a lower level. In the situation

Montenegro is now, it is necessary to employ the knowledge that its population possesses through coordinated activities, in order to increase and better utilize its potentials. Any delay in it could lead to irreversible effects, and a significant and irrecoverable lagging in the development. Making knowledge as a key resource, the creator and disseminator of which will be the population, should be recognized as a primary issue of Montenegro’s development. Nowadays, and in the times yet to come, this knowledge is and will become a key factor that defines the speed

and size of development and the progress of the country. Research, the main source of knowledge and new ideas, is the main prerequisite for success. Those societies which organize an intensive, high quality and successful research system and demonstrate the ability to implement its results will be progressive both in the economic sense and in the developing of its social systems.

The nature of new knowledge is changing both in our country and worldwide. A breakthrough into new knowledge is no longer the result of research in a single discipline, but the result of multidisciplinary approach. To that effect, there is an increasing need for team work in complementary skills, and for the creation of researchers’ networks directed to applied science, which often generate the vital questions, the answer to which may be sought through further fundamental research. Research generates new knowledge, and knowledge generates innovations as a principal prerequisite for achieving competitiveness. The synergy of competitiveness, social cohesion and environment will provide for a successful resolution of many of the problems we are going to be faced with.”

As said in the document which is the basic document for defining strategic national development policy: „the 21st century will, inter alia, be marked by the disappearance of many cultures, and languages, together with the forgetting of history, the loss of sovereignty by states-nations, reestablishing environmental balance, poverty eradication, as well as the emergence of global and supranational institutions which will take over regulative and other activities, and much more. Therefore for Montenegro the questions are posed how to preserve its existence, become an active and competitive participant in European and world events and economy, and in the increasingly globalized society, how to improve the life of its citizens and preserve its identity in this process.

The answers to those questions should be sought in the goals or common values the implementation of which is in the interest of the majority of Montenegro’s citizens, when thinking about the future. In order to achieve that, it will be necessary to:

- Build the knowledge based society with the preservation of Montenegro’s Cultural Identity.
- Live improving the ecological balance (ecological state).
- Build a coherent society of tolerance.
- Practice living based on the philosophy of development.
- Provide to citizens a wealthy and happy society.

In order to reach these goals it is essential to provide both continuity and persistence. In that regard the goals may differ in their relevance at given times, but not their importance.”

National development priorities are completely compatible with EU goals and EU 2020 strategy which sets three mutually reinforcing priorities:

- Smart growth: developing an economy based on knowledge and innovation;
- Sustainable growth: promoting a more resource efficient, greener and more competitive economy;
- Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.

2.4 Social innovation

The concept of social innovation in Montenegro is not recognized, at least not under that name, which is reasonable having in mind the fact that the notion of social innovation is quite recent in research community elsewhere. It has been promoted as the field of research in the 2011 Work Program in the Thematic Program Social Sciences and Humanities of the FP7.

However social innovation has not been examined as a theme within SSH and the emphasis were on innovation in material sense and influence of innovation in technology on social and economic environment. As in the environment where concept of welfare state dominates the results of changes in technologies are not always considered desirable, as technological change sometimes influence rising

inequalities. For example, even in developed countries with modern technology, global economic crisis influenced rising unemployment and caused strong social pressure.

Research on social innovation in Montenegro and WBC countries, even though it is not named like that, usually focuses on social policy, inequality, vulnerable groups, minorities, poor population, demographic changes, unemployment, social protection, violence, cultural and religious aspects of social life etc. The project of Montenegrin Academy of Sciences and Arts „Montenegro in 21st century – in era of competitiveness“ largely deals with these issues, however the notion of social innovation is not mentioned in this form.

3 Integration of Montenegro in the European Research Area in the field of SSH

Montenegro is included in the European Research Area and international scientific programs through following programs – each of which has SSH component:

1. FP7 – Seventh Framework Program for research and technological development of the EU where Montenegro has the status of associated country since 2008.
 - SEE-ERA.NET – Montenegro is participating in realization of SEE-ERA.NET common project of networking of research institutions of 14 WBC and EU member states;
 - SEE-ERA.NET PLUS – joint research projects will be financed under this project which has been approved by European Commission within FP7;
 - WBC-INCO.NET – the project which is performed under the FP7 (January 1, 2008 – December 31, 2013) aims to coordinate research policies of WBC and bring them in accordance with EU policies.
2. NATO Program Science for Peace and Security – Montenegro is the part of this program from 2007 and its priorities are information security, environmental protection, socio-economic sciences and humanities, biotechnology;
3. CIP EU program (EU Competitiveness and Innovation Program) – Montenegro is associated to one of the components of this program – EIP (component designed for entrepreneurship and innovation) which provide support for the development of entrepreneurship and innovative capacities of business sector. The institution coordinating this program is the Directorate for Small and Medium Enterprise, which is proposed by the Ministry of Education and Science also to be

responsible for the EUREKA initiative (pan-European network for market oriented research);

4. COST actions – Montenegro is participating in actions of COST (European Cooperation in Science and Technology);
5. Montenegro has representatives in numerous international committees and forums such as JRC Government Board (Government Boards of Joint Research Centers); ESFRI (European Strategic Forum on Research infrastructure); CREST (Scientific and Technical Research Committee);
6. E.CRIS.CG – forming of codified and classified base of researchers in Montenegro;
7. Statistical monitoring of SRA – cooperation between Ministry of Science and MONSTAT with EU relevant bodies in order to bring statistical methodology in area of scientific research accordance with EUROSTAT;
8. Bilateral cooperation – Montenegro has signed agreements on bilateral cooperation in SRA with Austria, Slovenia, Croatia, Serbia, FYROM, Albania, Bosnia and Herzegovina, Bulgaria, and China. Agreements with Italy, Russia, Hungary, Czech Republic, Turkey, Greece, and Spain are being prepared. Montenegro has implemented bilateral projects with Slovenia, Croatia, and Austria.

4 SWOT analysis of the SSH research capacity in Montenegro

<p>4.1 Strengths</p> <ul style="list-style-type: none"> • Large number of researchers in SSH field; • Large share of SSH research institutions in total number of research institutions; • Large share of private institutions in total number of SSH research institutions; • Social sciences and humanities are popular among young population; • Good quality physical infrastructure of private and some public research institutions. 	<p>4.2 Weaknesses</p> <ul style="list-style-type: none"> • Very poor funds for financing projects in SSH; • Priority in financing is given to projects in natural sciences and mathematics; • Small and fragmentized projects in SSH; • Poor cooperation between research institutions from Montenegro; • Poor cooperation between public and private institutions in SSH; • Low level of financing SRA from business sector; • Lack of understanding of business sector that SRA can bring direct benefits to company; • Low level of participation in EU programs; • Montenegrin SSH researchers are not visible in international research area; • Statistical methodology in the field of research and science is not compatible with EUROSTAT methodology; • Montenegro still has not officially defined priorities of research in SSH area; • Lack of knowledge and experience in preparing and realizing these projects.
<p>4.3 Opportunities</p> <ul style="list-style-type: none"> • EU integrations will enable Montenegro to use European funds - international cooperation and Framework Programs, IPA funds and mobility programs like Marie Curie etc.; • EU integration imposes the need to satisfy European standards and requirements which necessarily means intensified SRA; • Raised awareness of government and business sector on importance of SRA; • Developing interest of business sector to support SRA; • To use potential of Montenegro's Research Diaspora; • Use international connections of certain SSH researchers and research institutions; • Training programs about the procedure of applying for EU research funds. 	<p>4.4 Threats</p> <ul style="list-style-type: none"> • Cutting budget spending can endanger expenditures for science overall especially to SSH; • Economic crisis endanger private businesses which could otherwise be interested to invest in SRA; • Giving priority to natural sciences and mathematics can additionally reduce funds available for SSH research; • Inadequate competencies of researchers to participate in international projects; • Lack of interest in the public sector to participate in international programs and ERA can also occur as problem; • Brain drain is a significant threat.

4.1 Strengths

Main strengths of the social science and humanities field in Montenegro are the result of the fact that Montenegro has large number of researchers in SSH fields in comparison to other fields of science. It is also the fact that social sciences and humanities are popular among the young population, which is represented through the structure of students by the field of studies. There are 19 research institutions (out of 40) in the field of social sciences and humanities, which is relatively high percentage in comparison with other countries. Nine out of these 19 institutions are private institutions, which is encouraging. Physical infrastructure of private research institutions in SSH field – private universities (University UDG and Mediterranean) and at independent research institutions such as Institute for Strategic Studies and Prognoses and Centre for Ent-

repreneurship and Economic Development provide conditions for realization of high quality projects and satisfy EU requirements. These institutions are the proof that private entities are interested in development of SRA activities in Montenegro.

4.2 Weaknesses

Main weakness of the SSH research sector in Montenegro lies in the fact that funds for financing projects in this field are very poor. The fact is that financial sources for funding overall SRA are very limited and in Montenegro priority is given to projects in natural sciences and mathematics, so SSH projects are usually small and fragmented projects. Cooperation between research institutions from Montenegro is rather poor, which significantly reduces the potential to develop and find investors for their research projects. The cooperation between public and private institutions is also on very low level. Business sector is almost not interested in financing SRA. Even if some companies are indirectly funding research activities it is usually in form of donations. There is a lack of understanding that invest-

ments in SRA can bring direct benefits to companies. The research community of Montenegro is almost not involved in the realization of international and EU research projects; neither it uses programs of professional development funded by EU institutions. Montenegrin SSH researchers are not visible in the international research area. Statistical methodology in the field of research and science is not compatible with EUROSTAT methodology, so there is no data for comparative analysis. Montenegro still has not officially defined priorities of research in SSH area. There is a lack of knowledge in preparing EU projects and a lack of experience in realizing these projects.

4.3 Opportunities

EU integration processes will enable Montenegro to use European funds to develop SRA in SSH field. This includes improving capacities for international cooperation and Framework Programs, IPA funds and mobility programs like Marie Curie etc. EU integration imposes the need to satisfy European standards and requirements which necessarily means intensified SRA. Global economic trends and problems the modern global society is facing raise awareness of government and business sector on the importance of SRA in SSH. Private research institutions in SSH field are succeeding to acquire some funds for their

research activities from businesses, which is encouraging. Montenegro's research Diaspora has strong capacities which can be used in order to develop SRA in the country. Certain SSH researchers and research institutions, especially private universities such as UDG and private institutions such as ISSP and CEE, which are members of many international networks, have wide international connections which can be utilized in the future. It would be very useful to organize training programs for researchers about the procedure of applying for EU research funds.

4.4 Threats

The global economic crisis imposed the need to cut budget spending which can also mean cutting expenditures for scientific research activity from domestic and international sources. Economic crisis also endangers private businesses which could otherwise be interested to invest in SRA. The fact that Montenegro sees its priority in development of natural sciences and mathematics can additionally reduce funds available for SSH research. Development of

SRA in SSH can be endangered by inadequate competencies of researchers to participate in international projects. Lack of interest in the public sector to participate in international programs and ERA can also occur as problem, as "safety" of their working position is not giving them incentives to invest in themselves. There is always the threat that young researchers will go out of country if relevant institutions do not provide them adequate conditions.

5. SSH research priorities for Montenegro

Before giving a list of SSH research priorities in Montenegro, it must be emphasized that statistical methodology in Montenegro is not harmonized with the Decree of European Commission on statistical methodology in science and research (Commission Regulation 753/2004). This means that there are no available and reliable data on science and research activities in Montenegro, compliant with

EUROSTAT methodology. This limits the possibility to give a relevant comparative analysis in this field. Statistical office of Montenegro – MONSTAT and Ministry of Science are working on harmonizing this methodology, implementation of new methodology and providing comparable data is the prerequisite for further development of SRA.

5.1 SSH Research priorities on the basis of the country's readiness*

5.1.1 Priority 1 - Fostering economic growth and employment

Montenegro's economy is a transitional economy in an advanced stage – experiencing disappearance of the old economic structure, primarily industrial, and failing to fully build the new structure; the market is still confined (monopolies), technologically at a low level with unfavorable structure. Economy is characterized by low savings and low labor productivity, low level of domestic capital, whereas the domestic entrepreneurial class is just emerging; having lack of European work practices. Economy is dependent upon the foreign capital and services sector, what makes it vulnerable, especially in periods of general crises. Research and science in the economic sector (financial and real) are completely neglected, as well as are investments in upgrading the level of management quality and corporate governance. In order to change the situation it is necessary to create competitive market structures, the conditions for the development of entrepreneurship, an innovative economy, and especially through the upgrading of the technological level of processing in the existing and the development of new industries, as well as the development of ecological entrepreneurship. It should be understood that innovation, as the result of the new knowledge, is the one to create in the new program of research in the field of SSH.

Possible activity of the Work Program 2012:

Activity 8.1: Growth, employment and competitiveness in a knowledge society - the European case - Area 8.1.1. Changing role of knowledge throughout the economy: SSH.2012.1.3-2 Innovative policies for employment and labor markets;

Activity 8.2: Combining economic, social and environmental objectives in a European perspective: Paths towards sustainable development - Area 8.2.1. Socio-economic development trajectories

*Readiness priorities are priorities for which the country has the appropriate human resources and research infrastructures in order to pursue research and development.

5.1.2 Priority 2 - Building competitive innovation and research oriented education system

Strategy for financing and development of higher education in Montenegro 2011-2020 proposes the development of research oriented higher education. This goal could be achieved through an intensified research component in process of acquiring knowledge at all higher education institutions and internationalization of research. It is important to identify Montenegrin research Diaspora and create conditions for them to contribute to the development of their field in Montenegro. All of this is possible in case we succeed to engage young people in the research activities, to support young researchers and students organization which are active in the scientific research, etc.

Possible activity of the Work Program 2012:

Activity 8.1: Growth, employment and competitiveness in a knowledge society - the European case - Area 8.1.1. Changing role of knowledge throughout the economy: SSH.2012.1.1-1. Challenge: Education systems in the 21st century

5.1.3 Priority 3 - Strengthening the relationship between science and businesses

The development of SSH fields depends on the awareness of the business sector that investing in SRA can bring them direct benefits. That's why programs which promote cooperation between businesses and research institutions must be promoted. On one side, it will bring benefits to companies, and on the other it will increase the share of business and private sources of financing SRA activities. With that respect, all activities and projects that promote innovation and entrepreneurship are welcome.

Possible activity of the Work Program 2012:

Activity 8.1: Growth, employment and competitiveness in a knowledge society - the European case; Area 8.1.1. Changing role of knowledge throughout the economy. SSH.2012.1.1-2. Unveiling creativity for innovation in Europe

5.2 SSH Research priorities on the basis of future potential**

5.2.1 Priority 1 - Development of knowledge society – promoting innovation and research

his priority is best described in the project of Montenegrin Academy of Sciences and Arts „Montenegro in 21st century – in era of competitiveness:

„In Montenegro, the role and importance of knowledge has not yet been recognized for its development. Some other options, such as political engagement, are far more valued. In addition, domestic knowledge, and experience – their values and capabilities have been underestimated and in a number of cases they have been replaced by foreign knowledge, this latter often being at a lower level. In the situation Montenegro is now, it is necessary to employ the knowledge that its population possesses through coordinated activities, in order to increase and better utilize its potentials. Any delay in it could lead to irreversible effects, and a significant and irrecoverable lagging in the development. Making knowledge as a key resource, the creator and disseminator of which will be the population, should be recognized as a primary issue of Montenegro's development.

Nowadays, and in the times yet to come, this knowledge is and will become a key factor that defines the speed and size of development and the progress of the country. Research, the main source of knowledge and new ideas, is the main prerequisite for success. Those societies which organize an intensive, high quality and successful Montenegro search system and demonstrate the ability to implement its results will be progressive both in the economic sense and in the developing of its social systems. The

nature of new knowledge is changing both in our country and worldwide. A breakthrough into new knowledge is no longer the result of research in a single discipline, but the result of multidisciplinary approach. To that effect, there is an increasing need for team work in complementary skills, and for the creation of researchers' networks directed to applied science, which often generate the vital questions, the answer to which may be sought through further fundamental research.

Research generates new knowledge, and knowledge generates innovations as a principal prerequisite for achieving competitiveness. The synergy of competitiveness, social cohesion and environment will provide for a successful resolution of many of the problems we are going to be faced with."

Possible activity of the Work Program 2012:

Activity 8.1: Growth, employment and competitiveness in a knowledge society - the European case - Area 8.1.1. Changing role of knowledge throughout the economy

**Potential priorities are considered attractive for the country and have future potential. However, the level of readiness and capacity to pursue research and development is currently low.

5.2.2 Priority 2 - Keeping national identity and cultural uniqueness in globalized world

Cultural identity of Montenegro has deep origins in history. Montenegro is a good example of a country with inheritance of culture of various communities, religions, civilization: Mediterranean, Continental, Oriental, Byzantine, Western, Eastern, European, Balkan, Yugoslav, in other words on the basis of predominant religious patterns: Eastern-Christian, Western-Christian and Islamic. These historical developments of the state and its culture have created a specific contemporary national and cultural identity. The Montenegrins are proud of their cultural identity and cultural heritage.

The most important problem is how to shape the strategic directions of the cultural policy in the future, in other

words how to avoid the dissolving of Montenegro cultural identity in the globalized world, and, at the same time, not to ignore the positive dimensions of that world, preserving own identity.

Possible activity of the Work Program 2012:

Activity 8.3: Major trends in society and their implications; Area 8.3.3. Cultural interactions in an international perspective

5.2.3 Priority 3 - Facing demographic challenges

Demographic forecast of United Nations says that 7 billion and 200 million people will live on the Earth in 2015. How will this fact affects the planet Earth? What problems are caused with respect to food, energy, drinking water?

This growth of population is the feature of underdeveloped countries, while at the same time developed countries

from Western civilization face the problem of population aging and decline, which invoke problem of financial sustainability of pension systems.

In the course of the second half of the 20th century Montenegro was exposed to a powerful process of demographic transition. From a country with a high birth rate, mor-

tality rate and a natural increase in the total population, with young age structure, extensive foreign and internal migrations, and an evenly distributed population, it has been transformed into a country with low total population growth, low birth rate and a low natural population increase, with an increasing mortality rate, an ageing population, a low rate of external migrations, increasingly uneven population distribution and an accelerated pace of urbanization, the tendencies of which are long-term. EU

and global integration will force Montenegro to face these demographic challenges.

Possible activity of the Work Program 2012:

Activity 8.3: Major trends in society and their implications - Area 8.3.1. Demographic changes

References

- Strategy of Development for Scientific Research Activities in Montenegro 2008-2016, Ministry of Education and Science, Government of Montenegro, 2008;
- Strategy for Financing and Development High Education in Montenegro 2011-2010, Ministry of education and sport, Government of Montenegro, 2011;
- Law on Scientific Research Activity in Montenegro (2011);
- Law on Higher Education in Montenegro (2004; 2011);
- Law on Montenegrin Academy of Sciences and Arts (1994);
- Djurovic, M. ed. "Montenegro in XXI century – in era of competitiveness", Montenegrin Academy of Sciences and Arts, 2010 and all subprojects:
- Buric, M. ed. "Environment and Sustainable Development";
- Vukotic, V. ed. "Economic development";
- Djurovic, G. ed. "Integration into the European and Euro-Atlantic Structures";
- Sukovic, M. ed. "Building and Functioning of the State of Montenegro";
- Vlahovic, P. ed. "Population Aspects";
- Vujosevic, I. ed. "Energy";
- Tomovic Sundic, S. ed. "The Issues of Values";
- Vukovic, N. ed. "The cultural environment";
- Vukotic, P. ed. "Education";
- Mirkovic, J. ed. "Science and Technology".
- Web sites of all relevant institutions mentioned in the document.

Additional Questionnaire

This questionnaire aims at producing an inventory of research structures, current and future R&D priorities, and policies for cooperation between Western Balkan Countries in the field of R&D in the domain of *Social Sciences and Humanities*.

Theme: Social Sciences and Humanities

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Section A: Main R&D resources in the field of Social Sciences and Humanities

A 1. List of institutions / organisations: main RESEARCH PERFORMERS in the PUBLIC sector in the S&T field of Social Sciences and Humanities (such as national universities, government laboratories, institutes etc.)

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	Name	Postal address	Web-site
	Montenegrin Academy of Science and Arts (CANU) ⁷	Rista Stijovica 5, 81000 Podgorica, Montenegro	www.canu.org.me
1.	The Historian Institute of Montenegro, University of Montenegro	Bulevar Revolucije br.5, 81000 Podgorica, Montenegro	www.iicg.ac.me
2.	The Institute of Foreign Languages, University of Montenegro	Jovana Tomasevica 37, 81000 Podgorica, Montenegro	www.isj.ac.me
3.	The Institute for Montenegrin Language and Literature	blvd. Mihaila Lalića No. 1, 81000 Podgorica, Montenegro	www.icjk.me
4.	Faculty of Economics, University of Montenegro	Jovana Tomasevica 37, 81000 Podgorica, Montenegro	www.ekonomija.co.me
5.	Faculty for Sport and Physical Education, University of Montenegro	Narodne omladine bb, 81400 Niksic, Montenegro	www.fsnk.ac.me
6.	Faculty of Philosophy, University of Montenegro	Danila Bojovisa bb, 81400 Nikšić, Montenegro	www.ff.ac.me
7.	Faculty of Law, University of Montenegro	13. jula br.2 , 81000 Podgorica, Montenegro	www.pravni.net
8.	Faculty of Political Science, University of Montenegro	Ulica 13. jula 2, 81000 Podgorica, Montenegro	www.fpn.co.me
9.	Faculty for Tourism and Hotel Management, University of Montenegro	Stari grad 320, 85 330 Kotor, Montenegro	www.fthkotor.me

7. Montenegrin Academy of Science and Arts (CANU) is the supreme institution in the field of sciences and arts in Montenegro. Its activities and role are regulated by The Law on Mongenegrin Academy of Sciences and Arts. It is an instituion funded directly from Government budget and it realizes projects in the all fields of science and arts. Those projects are usually realized within the institution (CANU)

A 2. List of institutions / organisations: main RESEARCH PERFORMERS in the PRIVATE sector in the S&T field of Social Sciences and Humanities (such as national universities, government laboratories, institutes etc.)

	Name	Postal address	Web-site
1.	Faculty for International Economics, Finance and Business, University Donja Gorica (UDG)	Donja Gorica bb, 81000 Podgorica, Montenegro	www.udg.edu.me/fmefb
2.	Faculty of Law, University Donja Gorica (UDG)	Donja Gorica bb, 81000 Podgorica, Montenegro	www.udg.edu.me/fpn
3.	Institute for Strategic Studies and Prognoses	Crnogorskih serdara, Lamela C, I/II, 1000 Podgorica, Montenegro	www.isspm.org
4.	Center for Entrepreneurship and Economic Development	Kralja Nikole 27/IV, 81000 Podgorica, Montenegro	www.visit-ceed.org.me
5.	Faculty of Business Studies - Montenegro Business School, University Mediterranean		www.fps.unimediterran.net/
6.	Faculty of Law, University Mediterranean,	Serdara Jola Piletica bb, PC Palada, 81000 Podgorica, Montenegro	www.pf.unimediterran.net
7.	Montenegro Tourism School, University Mediterranean	Obala Marsala Tita bb, 85000 Bar, Montenegro	www.ftht.unimediterran.net
8.	Faculty for Foreign Languages, University Mediterranean	Vaka Djurovica bb, 81000 Podgorica, Montenegro	www.fsj.unimediterran.net
9.	Faculty for Transport and Communication Management	Donje Luge bb, 84300 Berane, Crna Gora	www.fmsk.me

A 3. Organisations responsible for financing R&D in the field of Social Sciences and Humanities

	Name	Web-site	Financing R&D–Year 2009: Total amount in national currency (000)	Financing R&D– Year 2009: Total amount in EUR (000)
1.	Ministry of Science ⁸	www.mna.gov.me		59.672,49
2.				
3.				
4.				
5.				
6.				
7.				
TOTAL:				

8. As Montenegrin Academy of Science and Arts (CANU) has specific role in R&D system in Montenegro, it is directly financing some projects in the field of social sciences and humanities. CANU usually finances projects in its own institution. Some of them refer to Social Sciences and Humanities as CANU has Department for Natural Sciences, Department for Social Sciences and Department of Arts – each of those departments organize work of their Cometees. (Please see Reference 1 above).

A 4. How research is performed (indicate all that apply)

	Lead participating body (please use numbers from question A 3)	Other relevant bodies (please use numbers from question A 3)
In own institutions		CANU
Published calls for tenders, open to all researchers	1	
Restricted tenders to preferred suppliers		
Co-funding with other national bodies	1	
Co-funding with other countries	1	
Other approaches – please fill in: _____		
Other approaches – please fill in: _____		
Is support restricted to national bodies (Y / N)		

A 5. R&D capacity* in SSH field

	2009 ⁹
Total number of research organizations	36
Of which universities	29 (university units – faculties)
Of which public research organizations	24
Of which private research organizations	12
Number of PhD students graduated	18
Total number of R&D personnel	1512
Percentage of women in the total number of R&D personnel	52,4%
Total number of employees on a Full-Time-Equivalent (FTE) basis	n/a
Total number of researchers	781
Percentage of women in the total number of researchers	46,2%
Total number of researchers on a FTE basis	323 ¹⁰
Number of researchers with Ph.D. degree or higher	n/a
Number of researchers with Ph.D. degree or higher on a FTE basis	n/a
Number of researchers under the age of 35	n/a
Number of researchers under the age of 35 on a FTE basis	n/a

* Please use OECD - Frascati Manual definitions if possible.

A 6. Research infrastructure in S&T field of Social Sciences and Humanities

a) Assessment of the physical research infrastructure (without office equipment)

The R&D institutions in general have an internationally competitive research infrastructure and are able to conduct top research in cutting-edge research topics	
The R&D institutions in general have top research infrastructure, the infrastructure enables regular international research co-operation but are not competitive if compared with the 'best in this research field'	x
The R&D institutions in general have good quality research infrastructure, probably one of the most up-to-date in the country, but are not good enough to join in international research on a regular basis	
The R&D institutions in general have a rather obsolete research infrastructure if compared with international organisations and this is an obstacle to international research co-operation	
The R&D institutions in general have a rather obsolete research infrastructure and it is an obstacle to more domestic contracts	
The R&D institutions in general have no substantial infrastructure, but they have access to it and can participate in top research both nationally and internationally	

9. Source of data: Montenegro Official Statistical Office – MONSTAT and Ministry of Science. New Law on Scientific Research Activity was adopted in 2010. Currently there are 3 universities (one state and two private universities) whose units (faculties) are registered as research institutions. In total there are 40 research scientific institutions – 29 university units, 2 independent faculties, and 9 independent research institutions. Out of total number of 40 research institutions 13 are private research institutions, and two of them are organized by companies.

10. Estimate based on the data for on FTE researchers for 2008, total number of researchers for 2008 and 2009

b) Most important physical research infrastructure in S&T field of Social science and humanities

Due to its nature, research in Social Sciences and Humanities does not require large physical infrastructure. However the most important infrastructure is located at:

1. Three Montenegrin Universities and their libraries. Beside University of Montenegro, infrastructure and libraries of two private universities must be mentioned, especially new building of University Donja Gorica, and new premises of University Mediterranean which are still not completely finished.
2. Montenegrin Academy of Sciences and arts is in process of constructing new, modern building – those premises will also be very important physical infrastructure having in mind rich library fund of this institution.
3. Two private independent research institutions (ISSP and CEED) also have modern infrastructure in the area of SSH research, which is not very common occurrence if we know that these institutions usually finance their research from private funds.

A 7. Large and/or National R&D projects in S&T field of Social Sciences and Humanities

	ongoing /started in 2009	completed in 2009
Number of large R&D projects**	1 ¹¹	
Of which: the number of projects in collaboration with industry		
the number of projects in which the national organisation co-ordinates		
the number of EU FP projects in which national institutions participate		
the number of EU FP projects in which national institutions coordinate		
Number of national R&D projects***		
Of which: the number of projects in collaboration with industry		

** the total project budget is above EUR 100 thousand and the national institutions' share is at least EUR 20 thousand

*** projects funded in some proportion (10-100%) by the national agency/ ministry

A 8. Source of financing of R&D activities in S&T field of Social Sciences and Humanities¹²

	Year 2009 – Share in %:
a) Private companies?	
b) International sources (such as the EU, UN, OECD, NATO etc.)?	
c) Not competitive* government financing?	100
d) Competitive* government financing?	
e) Other sources (foundations, non-profit organisations, etc.)?	

* Projects won after competitive bidding procedures – so that the organisation can actually lose the funding targeted at the end of the procedure – count as source on a competitive basis. If the organisation participates in a money-allocation mechanism so that the money cannot be lost (but e.g. „only“ reduced), it counts as source on a non-competitive basis of research funding even if the procedure itself is called „competitive bidding“.

Section B: Qualitative assessment of the S&T field**B 1 Current situation in SSH****a) What are the main national development policy priorities?**

The main national development policy priorities are defined in the document „Montenegro in 21st century – in era of competitiveness“, which was created as the result of cooperation between Government of Montenegro and supreme scientific and research institution in Montenegro – Montenegrin Academy of Science and Arts. As said in the document which is the basic document for defining strategic national development policy: “the 21st century will, inter alia, be marked by the disappea-

11. In 2009, Montenegrin Academy of Sciences and Arts CANU has started the project “Montenegro in XXI century – in the Era of Competitiveness” worth of €920.000. This project was financed directly by the Government – the Memorandum was signed between the Government and CANU. As the goal of the project was broadly defined as the development of many areas of Montenegrin society it can be considered as project in the field of Social Sciences and Humanities. This project was successfully finished in 2010. (http://www.canu.org.me/cms/novosti/op%C5%A1te_novosti/crna_gora_u_xxi_stolje%C4%87u_-_u_eri_kompetitivnos-ti_20101012442/)

12. During 2009 several private R&D institutions: Institute for Strategic Studies and Prognoses; Center for Entrepreneurship and Economic Development; and Faculty for International Economics finance and business have realized several project with scientific and research character (several studies which are published, volume of international economic journal). These projects were funded from private sources or independent government agencies. However, back in 2009, these institutions were not in official registry of Scientific and Research institutions. That's why the value of these projects is not included into the calculation in the table.

rance of many cultures, and languages, together with the forgetting of history, the loss of sovereignty by states-nations, reestablishing environmental balance, poverty eradication, as well as the emergence of global and supranational institutions which will take over regulative and other activities, and much more. Therefore for Montenegro the questions are posed how to preserve its existence, become an active and competitive participant in European and world events and economy, and in the increasingly globalized society, how to improve the life of its citizens and preserve its identity in this process. The answers to those questions should be sought in the goals or common values the implementation of which is in the interest of the majority of Montenegro's citizens, when thinking about the future. In order to achieve that, it will be necessary to:

- Build the knowledge based society with the preservation of Montenegro's Cultural Identity.
- Live improving the ecological balance (ecological state).
- Build a coherent society of tolerance.
- Practice living based on the philosophy of development.
- Provide to citizens a wealthy and happy society.

In order to reach these goals it is essential to provide both continuity and persistence. In that regard the goals may differ in their relevance at given times, but not their importance."

National development priorities are completely compatible with EU goals and EU 2020 strategy which sets three mutually reinforcing priorities:

- Smart growth: developing an economy based on knowledge and innovation;
- Sustainable growth: promoting a more resource efficient, greener and more competitive economy.
- Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.

b) What are the main R&D priorities?

The Strategy for Scientific and Research Activities (RDA) 2008-2016 was adopted by Government of Montenegro on July 17, 2008, and on proposal of Council for Scientific and research activity. The primary task of the Strategy is to foster the development of science and technology and enhance their overall contribution to the development of society with the highest possible appliance of the new one through connecting science with education and the industry, the creation of one's own knowledge and technology. According to this document, the main strategic tasks of R&D policy makers in Montenegro are as follows:

- Reform of the institutional framework for engagement in scientific-research activity
- Stimulate innovation and technological development
- Stimulate international cooperation at all levels of scientific-research activity
- Realization of functional priorities of scientific-research activity
- Increase scale of investment into scientific-research activities

After establishment of the Ministry of Science as independent Ministry in the new Cabinet which was elected by Montenegrin Parliament at the end of 2010, and adoption of new Law, institutional and legal frameworks in R&D have changed, so the Ministry of Science and Council for Scientific Research activity plan revision of this Strategy. The Ministry set up its strategic priorities in R&D as follows:

1. Development of national R&D system;
2. Bilateral and multilateral cooperation;
3. Linking businesses and science.

c) How would you put identified R&D priorities in EU research topics?

The new Working Programme for 2012 broadly defines themes in which the national research priorities can relatively easy fit. The revision of the Strategy for RDA would enable Montenegro to increase compatibility with EU research topics. However Montenegrin institutions are very small and do not have experience in participating and leading EU projects so it brings difficulties in search for partners and coordinators for projects of mutual interests. This means that Montenegrin institutions might need support in this area.

B 2 Future priorities

a) Describe how your future R&D priorities are selected and priorities agreed (e.g. foresight)? Are these driven by national policy priorities?

As already stated above R&D priorities are defined by the Council for Scientific and Research Activity and are driven by national policy priorities. At the same time national policy priorities are being defined in the context of future EU integration of Montenegro and are being set according to EU priorities.

b) Over the next 10 years, what will be the main R&D policy issues in this S&T field?

The main R&D policy issues in the field of Social Sciences and Humanities will be defined according to the EU research priorities. Montenegro has the status of the candidate country and Montenegro Government is waiting for European Commission assessment of requirement which Montenegro had to satisfy in reform priority areas in order to get the date of the start of

negotiations on accession. Undoubtedly, R&D priorities in the field of SSH (and not only this field), which are in line with national policy priorities defined in Government strategic documents will be focused on economic growth and employment, keeping national identity in future probably borderless environment, keeping cultural identity and uniqueness in globalized economy, building competitive education system, facing the challenge of demographic changes and last, but not the least – promoting innovation, research and entrepreneurship.

B 3 What national policy and R&D priorities should be the subject for establishment of specific co-operation with other Western Balkan Countries?

All of the priorities stated above as possible future priorities of R&D activities in SSH:

- Development of knowledge society – promoting innovation and research;
- Strengthening the relationship between science and businesses;
- Fostering economic growth and employment;
- Face demographic challenges;
- Keeping national identity and cultural uniqueness in globalized world;
- Building competitive innovation and research oriented education system.

B 4 It is hoped that this exercise will identify areas for future collaboration and R&D co-operation in this S&T field, probably leading to a possible WBC R&D co-operation proposals under FP7. These projects foresee four levels of co-operation. They range from:

- a) the minimum – exchange of information and results;
- b) Systematic exchange and development of complementary programmes;
- c) Development of common approaches to agreed R&D priorities;
- d) The maximum – full joint approaches, common programmes and pooled funds with open access to researchers from participating countries.

So, with this in mind, what levels of co-operative actions would your country be able to support in the future in this S&T field?

Development of international cooperation is one of the key priorities in R&D area. Montenegrin Ministry of Science promotes international cooperation on each of these 4 levels. Montenegro has signed agreements on bilateral cooperation in R&D area with Austria, Slovenia, Croatia, Serbia, FYROM, Albania, Bosnia&Herzegovina, Bulgaria, China. The Ministry is preparing the agreements with Italy, Russia, Hungary, Czech Republic and Turkey, and bilateral projects with Slovenia, Croatia, and Austria are underway. Our government has political will to enter common program as it is aware of the benefits it could bring to Montenegro.

B 5 A suggestion is to have a high level meeting once or twice a year; where WBC could decide upon themes on which to co-operate. This may lead to a proposal for a project or other forms of co-operation. Would your country be willing to participate in a high level meeting with other WBC to decide upon these themes?

I believe that there is strong will in Montenegro to participate in these meetings and establish strong cooperation with interested partners. These mutual projects and the synergy effects can bring benefits to all interesting parties and could be organized in the way which will provide achievement of national interest to all involved countries and bodies. That should be the leading idea and the strongest incentive to enter these activities.

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Co-ordination of Research Policies
with the Western Balkan Countries



Background Report on Social Sciences and Humanities MONTENEGRO

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