

WP2: PRIORITY SETTING TO STRUCTURE PARTICIPATION IN FP
National background report on Environment for SERBIA



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Executive Summary

The objective of this report is to provide an overview of the environment protection research in the Republic of Serbia (hereinafter: Serbia), and to identify the environmental research priorities for Serbia for the period 2008-2012. There are no policy documents at the moment which define strategic goals for the future in the R&D sector in Serbia, including environment research. However, the work on a new *National strategy for science and technological development* is currently in its final stages, and is scheduled to be completed by the end of June 2009. It is expected that it will define national strategic priorities of Serbia's development in the S&T field, including the environment sector. For decades the main funding body for environment research in Serbia has for decades been the MSTD. While the funding of research projects is based on regular competitive calls for project proposals (for a typical duration of 5 years), these are not thematic (i.e. no areas/themes predefined by the MSTD). Since the main research performers in the environment sector in Serbia are in the academic sector, comprised of both higher education and research organizations, research in the environment area has so far been driven by the interests of the main research performers themselves. As a result, few common broader research targets, and subsequently, priorities, can be defined. Analysis is based on the consultation process with experts in the field of the Environment, and the extensive analysis of the ongoing project supported by the Ministry of Science and Technological Development. Experts include their own experience in the environmental protection problem in this specific area. The focus was spotted on the prediction of WBC ecological systems changes, on tools and on technologies for monitoring, prevention and mitigation of environmental pressures and risks, and on the sustainability of the natural and man-made environment. As the result we suggest the two groups of priorities: *Environment Research Priority Sectors* and *Environment Research Priority Themes*.

Table of content

INTRODUCTION	1
1. Purpose of the national background report and methodology / Summary of the consultation process	1
2. The Environment S&T system in SERBIA	2
2.1 The overall Environment policy	2
2.1.1 The overall <i>Environment</i> policy framework	2
2.1.2 The elements of <i>Environment</i> research policy making	3
2.2 Overview of Environment research activities	3
2.2.1 <i>Environment</i> research projects	3
2.2.2 Key competencies in <i>Environment</i> research fields	5
2.2.3 <i>Environment</i> research infrastructure	6
2.3 Key drivers of Environment research	9
2.3.1 Main <i>Environment</i> sector trends in Serbia	9
2.3.2 Main socio-economic challenges in Serb	9
3. Integration of Serbia in the European Research Area in the field of Environment	12
3.2 The Stabilisation and Association Agreement between EU and Serbia	12
4. SWOT analysis of the Environment research capacity in Serbia	13
4.1 Strengths	13
4.2 Weaknesses	13
4.3 Opportunities	13
4.4 Threats	14
5. Environment research priorities for Serbia	14
Annex II Literature Survey	20
Annex III List of some FP Projects	22
Annex IV T&D Environmental Research Projects	24

Introduction

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

The objective of this report is to provide an overview of the environment protection research in the Republic of Serbia (hereinafter: Serbia), with a SWOT analysis of the research capacities and identification of environmental research priorities for Serbia for the period 2008-2012, based on the consultation process with experts in the field. The objective of the Environment Theme (according to FP7 Specific Programme for 'Cooperation'): is the promotion of a sustainable management of natural and human environment and its resources based on existing knowledge and the interactions among the biosphere, ecosystems and human activities with the idea of developing new technologies, tools and services, in order to adopt an integrated way of resolving global environmental issues. Emphasis will be put on the prediction of WBC ecological systems changes, on tools and on technologies for monitoring, prevention and mitigation of environmental pressures and risks, and on the sustainability of the natural and man-made environment.

This report is intended to contribute to shaping the future European Union (EU) - West Balkans (WB) research cooperation, through relevant European Commission (EC) initiatives, policies and funding programmes, so as to meet the interests and actual needs of environment protection in the region.

A consultation process took place from January to March 2009 in order to identify research priorities in the field of environment protection. The questionnaires were sent to the project managers of all ongoing environment protection research projects, except the managers for innovation projects (144 projects, 120 in basic research and TND and 24 innovation projects) funded by the Ministry of Science and Technological Development of the Republic of Serbia. The responses were obtained from 28 experts directly involved in the area of environmental protection.

Based mainly on the outcomes of the consultation process, and extended analysis of the published papers in the field of the environment protection, this report identifies a set of four research priorities for Serbia in the field of environment protection for the period of 2008-2012, in line with the proclaimed objective of the **wbc-inco.net** project. The idea is to identify RTD potentials and priorities for taking part in FP7 and other European research programmes and the funding schemes, as well as to increase the participation of researchers from the region in the European projects.

2. The *Environment* S&T system in SERBIA

2.1 The overall *Environment* policy

2.1.1 The overall *Environment* policy framework

The government and Parliament of Serbia adopted the National strategy for sustainable development in 2007. The strategy has eight parts from which part five was dedicated to the Environmental protection issue and to the sustainability of natural resources in the Republic of Serbia together with the impact of economical development on the environment. This part contains the goals, measures and priorities connected to the natural resources protection (air, water, soil, biodiversities, forests, mineral raw material resources and renewable energy sources), protection against various risk factors that influence the environment (climate changes, waste, chemicals, accidents, ionising and electromagnetic radiation, noise, natural disasters), protection from risk factors in various economical sectors (industry, mining, transport and tourism), together with developing clean technologies.

Four important laws in the field of environmental protection passed in 2004.

- **Environmental Protection Law; final version of this Law was passed in 2004.**
Published in the "Official Gazette of the Republic of Serbia", No. 135/2004 ("Službeni glasnik Republike Srbije", br. 135/04)
- **Law on environmental impact assessment (EIA)**
Published in the "Official Gazette of the Republic of Serbia", No. 135/2004 ("Službeni glasnik Republike Srbije", br. 135/04)
- **Law on integrated environmental pollution (IPPC) prevention and control**
Published in the "Official Gazette of the Republic of Serbia", No. 135/2004 ("Službeni glasnik Republike Srbije", br. 135/04)
- **Law on strategic environmental impact assessment (SEA)**
Published in the "Official Gazette of the Republic of Serbia", No. 135/2004 ("Službeni glasnik Republike Srbije", br. 135/04)

Besides the above the Government prepared a proposal of amendments to the Environmental Protection Law, as well as amendments to the Law of environmental impact assessment, together with a new law proposals of nature protection, air protection, noise protection, sustainable usage of fish found, packaging waste and waste management.

Integration into the Environmental Protection Management System:

- Domestic and international standards and regulations for management, certification and registration of the environmental protection management system
- Legal and private entity may certify the environmental protection management system according to **JUS-ISO 14001**, in compliance with the law.
- Legal and private entity may register the certified environmental protection management system in order to get involved into the system of environmental

protection management and control of the EU (hereinafter: **EMAS system**), in compliance with this Law.

Systems of Environmental Protection in Serbia:

- Protection of natural and cultural environments;
- Restoration of rivers and streams;
- Water protection areas, river basins;
- Releases of animals and plants;
- Action programmes for threatened species

2.1.2 The elements of *Environment* research policy making

The work on a new *National strategy for science and technological development* is currently underway, and is scheduled to be completed by the end of June 2009. It is expected that national strategic priorities of Serbia's development in the S&T field will be defined including the environmental protection sector.

While the Serbian Ministry of Science and Technological Development (MSTD) provides strong funding (currently 144 research grants) in the area of environmental protection, there are no explicit target research areas/themes as such (i.e. no areas/themes predefined by the MSTD). Instead of that the standard MSTD approach is bottom-up: MSTD typically announces calls for proposals for research grants in various fields (all include the themes of environmental protection). There were no special calls for environmental protection. Proposals go through an evaluation process by institutionalized research groups of reviewers qualified (external) for selecting projects to be funded.

Budgetary allocation for scientific research and technological development in 2008 was about 100 million EUR which present 0.3% of GDP.

Direct MSTD's support for environmental protection projects in 2008 was 9.7 million Euros which present 9.7% of whole budgetary allocations for S&T activities (2.3% for the Basic Research program and 7.4% for T&D).

While the projections for coming years were to increase this amount by a certain percent (as occurred during the whole 2001-2008 period), in view of the global economic crisis it is not realistic to expect an increase in 2009.

2.2. Overview of *Environment* research activities

2.2.1. *Environment* research projects

There are presently 144 ongoing research projects regarding environmental protection funded through the MSTD's latest completed call for proposals: *Research programme in the field of technological development for the 2008.-2011. period.*

These projects are led by research institutions:

Name of research institution
Institute of Geological Research Serbia, doo Belgrade
Electrical Engineering Institute "Nikola Tesla"
IMS – Institute for Materials Testing
Institute of Virology, Vaccines and Sera TORLAK, Belgrade
"Siniša Stanković" Institute for Biological Research
Institute for the Development of Water Resources "Jaroslav Černi"
Scientific Veterinary Institute "Novi Sad"
Institute of Land Management
Scientific Institute of Veterinary Science of Serbia
Institute for Criminological and Social Research
Institute for Multidisciplinary Research-IMSI
Institute of Chemistry, Technology and Metallurgy
"VINČA" Institute of Nuclear Sciences
Institute of Fundamental and Physical Chemistry
Institute of Mining and Metallurgy Bor
Institute of Physics
Institute for the Technology of Nuclear and Other Mineral Raw Materials
Institute of Forestry
Institute of Architecture and Urban & Spatial Planning of Serbia
Institute of Archaeology
IKS - 'Kirilo Savić' Research Institute
Institute for Animal Husbandry, Belgrade-Zemun
Institute of Forestry
Institute of Chemistry, Technology and Metallurgy
Institute for Plant Protection and Environment
Institute for Hygiene and Technology Meat
Institute of Field and Vegetable Crops, Novi Sad
Maize Research Institute, Zemun Polje
„Dr Josif Pančić“ Institute
"Mihajlo Pupin" Institute Belgrade
IHS Techno experts d.o.o. Beograd
Institute of Architecture and Urban & Spatial Planning of Serbia
Faculty of Stomatology Pancevo Academy of Economy Novi Sad
University of Belgrade, Faculty for Building Management „Union“
University of Belgrade, Faculty of Mining and Geology
University of Belgrade, Faculty of Agriculture
University of Belgrade, Faculty of Biology
University of Belgrade, Faculty of Civil Engineering
University of Belgrade, Faculty of Electrical Engineering
University of Belgrade, Faculty of Forestry
University of Belgrade, Faculty of Geography
University of Belgrade, Faculty of Mathematics
University of Belgrade, Faculty of Mechanical Engineering

Table continued

Name of research institution
University of Belgrade, Faculty of Physics
University of Belgrade, Faculty of Chemistry
University of Belgrade, Faculty of Security Studies
University of Belgrade, Faculty of Technology and Metallurgy
University of Belgrade, Faculty of Transport and Traffic Engineering
University of Belgrade, Faculty of Veterinary Medicine
University of Belgrade, Technical faculty in Bor
University of Kragujevac, Faculty of Mechanical Engineering
University of Kragujevac, Faculty of Natural Sciences and Mathematics in Kragujevac
University of Niš, Faculty of Electronic Engineering
University of Niš, Faculty of Civil Engineering and Architecture
University of Niš, Faculty of Mechanical Engineering
University of Niš, Faculty of Occupational Safety
University of Niš, Faculty of Natural Sciences
University of Niš, Medical Faculty
University of Novi Sad, Faculty of Agriculture
University of Novi Sad, Medical Faculty
University of Novi Sad, Faculty of Sciences
University of Novi Sad, Faculty of Technical Sciences
University of Novi Sad, Faculty of Technology
University of Novi Sad, Technical faculty 'Mihajlo Pupin' in Zrenjanin
University of Priština, Faculty of Sciences Kosovska Mitrovica
University of Priština, Faculty of Technical Sciences Kosovska Mitrovica
University of Priština, Faculty of Medical in Kosovska Mitrovica

Besides that, there are 25 bilateral projects with Greece, Hungary, Croatia, Slovenia, France, 14 of them concerning the various aspects of the environmental protection problems.

In SEER-ERA Net call seven Serbian projects passed reviews but were not accepted because of the lack of funding by the MSTD side.

预览已结束，完整报告链接和二维码如下：

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