# **EXTERNAL EVALUATION REPORT**

## **PROJECT**

# RESTRUCTURING OF DOCTORAL STUDIES IN SERBIA

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Project full title: Restructuring of doctoral studies in Serbia

Project Acronym: RODOS

Project No: grant number 787517.36, reference number 544093-2013

Funding Scheme: TEMPUS programme of the European Commission

Scope: National

Coordinator: Conference of the Universities of Serbia (CONUS)

Project start date: December 01, 2013

Project duration: 36 months

The report is the outcome of the project activity "5.3.External quality control by external experts", and covers the project lifetime until June 01, 2015. The evaluation is based on a variety of inputs. All materials on the project Web site and internal documents have been analyzed. Furthermore, the evaluator conducted a series of information obtained in communication with representatives of the project consortium members. This report provides the expert opinion on the status and progress of the Restructuring of doctoral studies in Serbia project, as well as the set of recommendations on how to further improve the implementation of the project activities and avoid some obstacles or week points.

The project has been designed to address restructuring doctoral studies in Serbia in line with the Bologna Process and Salzburg Principles. Activities of the project should provide an essential contribution to fulfilment of strategic commitment "to ensure the primary role of science at universities, to develop and improve the overall research potential, to generate teaching staff for HEI's and highest professionals for industry and civil services, contributing in such a way to the creation of new knowledge, to faster technological development and the improvement of cultural and national identity" stated in the document Strategy of the Development of Education in Serbia (SDES), 2012, Part IV). Synergic activity of 15 partners from Serbia and 4 universities from EU countries should result in Doctoral Schools, based on the integration of universities, institutes, industry and civil sector, which will be a guarantee for high quality research. The doctoral schools are seen as a vehicle for achieving critical mass of researchers and increasing the overall teaching and research quality. To achieve this goal numerous activities of the project are planned in order to achieve satisfactory quality and efficiency of doctoral studies.

The project would be realized in direct accordance with SDES 2012, the National Strategy of Research (2010), the Europe 2020 Flagship Initiatives, the Bologna process, the Salzburg principles, numerous recent documents issued by UNESCO, EUA, EURODOC, ERA, LERU, etc, and the strategic Tempus projects GOMES, SIGMUS and KNOWTS. It is expected that the project will contribute, in general, to the quality and relevance of Serbian HEI's, to the integration processes in and between HEI's, as well as to the harmonization with EU developments.

The specific sub-objectives of the project would be: 1) To reconsider the existing national policies/standards for doctoral studies and to develop new ones, better adapted to the EU standards and local experiences; 2) To develop a new model for public funding of doctoral studies; 3) To define more comprehensively the status of doctoral students (student rights, obligations, choice of supervisors, health insurance); 4) To make doctoral studies more compatible with the needs of industry and civil services and better adapted to an employment market that is wider than academia; 5) To develop the concept of doctoral schools as an integration factor at intra university and inter university levels; 6) To develop and test several specific models for new structures developed within 2-5; 7) To meet the challenge of interdisciplinary training and the development of transferable skills; 8) To ensure quality control by strong collaboration with students, QA institutions and other stakeholders; 10) To achieve dissemination and sustainability of the results starting from the fact the Consortium incorporates all Serbian institutions in charge of HE at the national level.

The primary target group of the project is the whole academic community (teachers, students, administrative staff and management), together with scientific research institutions, industry and civil services, although the whole society will benefit directly or indirectly from the project actions. The results of the project would contribute not only to a successful implementation of the Bologna principles, but also to the overall economy of the country by better planning and coordination of R&D and innovation

activities, strengthening the interaction of students, researchers and research teams through more intensive mobility between different branches, sectors and research institutions, fitting into the EU Modernization Agenda.

The partnership in the project corresponds very well to the objectives of the RODOS project. The Conference of Serbian Universities (CONUS), the Ministry of Education of Serbia (MEST), the National Council for Higher Education (NCHE) and the Serbian Academy of Science and Arts (SASA) have given the highest level of priority to the initiative to prepare the project application. All these institutions are aware of an utmost importance of doctoral studies for HE in Serbia and of the urgency to undertake necessary measures. The proposed Consortium is lead by the CSU, ensuring in such a way an impact of the project results at the national level and involvement of all Serbian HEI's. It contains also all public Serbian Universities, two largest private universities, SASA, MEST, NCHE, representatives from industry and students, together with four renowned Universities from EU having great experience in doctoral studies.

Activities that should be implemented to June 01, 2015 in accordance with the work plan and work packages will be presented in the following text.

**Activity 1.1** was dedicated to training on QA standards. Large number of partner country staff trained on QA standards at the EU partner universities: UGent, Ghent, July 2–4, 2014; Technical University of Crete (TUC), Chania, September 16– 20, 2014; University of Natural Resources and Life Sciences (BOKU), Vienna, December 11-13, 2014; UGent, Ghent, March 25–27, 2015; University of Lisbon (Instituto Superior Técnico), Lisbon, May 20-23, 2015.

Trainings were focused on the elaboration of procedures, systems & processes of QA in doctoral studies. Academic and administrative staff from EU partner universities presented their institutional experiences to Serbian colleagues. Focus was on closer examination of good practice models from EU universities.

Visits to UGent and University of Lisbon were implemented after the deadline specified in the work plan. The delay is not critical for the further implementation of the project, since most of the activities carried out on time. Also, overlaps with other activities in WP1 in the work plan are anticipated.

Unfortunately, more important than previous disadvantage is that the internal evaluations of the trainings were not performed. I note that in the document Quality Control and Monitoring specified: "Internal evaluation will include not only an analysis of the project activities by the CQCM, but also an analysis of questionnaires distributed to participants at the end of every seminar and training." So, there is no indication whether these events organized and implemented in such a way to be very helpful for the project implementation and realization of the main goals.

**Activity 1.2** was dedicated to evaluation of QA standards for doctoral studies in Serbia.

At the kick-off project meeting two working groups for QA standards were established: Working Group for Standards and Sub-Working Group for Standards. Tim to write a book on doctoral studies in Serbia was formed in parallel to these working groups. It was agreed at the joint meeting of the National Council for Higher Education and the National Council for Science and Technological Development held on June 16th 2014 in Belgrade, devoted entirely to the project RODOS. It was also agreed at the meeting that the book should be based on complete and deep analysis of the current

state of doctoral studies. In order to get a closer insight into the real state of doctoral studies in Serbia set of questionnaires was used. Questionnaires were distributed to all the higher education institutions of Serbia. Responses have been completed at the end of the summer 2014. It should be added that in Annex 2 of the book are attached existing Standards for accreditation of doctoral studies. Furthermore, RODOS conference entitled "Doctoral Studies in Serbia" was organized on December 4th 2014 in Belgrade, with more than 170 participants from all higher education institutions of Serbia. The book Doctoral Studies in Serbia was published in February 2015 and discussed at different events organized by RODOS and distributed to all Serbian HEI's.

Presented and other similar activities represent the very comprehensive evaluation of QA standards for doctoral studies in Serbia.

The main outcome of the **Activity 1.3** had to be the formulation and adoption of modified QA standards. At the Project Management Board (PMB) meeting in Belgrade, April 3rd, 2014, a related Working Group consisting of several experts has been nominated. This Working Group generated the first draft of the modified standards and presented it at the PMB meeting held on September 20th 2014 at Crete. After additional improvements of the document, it was decided at the PMB meeting on December 16th 2014 to enlarge the initial working group so as to have representatives from all the partner institutions. Such a Working Group continued the work on the elaboration of new standards, and came up with a modified version at the meeting held on May 15th, 2015. The meeting was jointly organized by the two working groups: Working Group on Standards and Working Group for Funding. It was agreed to reduce the number of members of the working groups. The goal was to make the groups more operational and easier to finalize the draft documents.

All interested parties are invited, within 15 days, to submit comments and suggestions for improving the text. Based on the suggestions received Working Group on Standards should prepare final text on modified QA standards.

The Working Group on Standards did not finish the modified draft document to June 01, 2015 (deadline for completion of Activity 1.3), required to be submitted NCHE and MEST for their fine tuning and adoption.

The main outcome of the **Activity 1.4** was supposed to be analysis of the existing different systems for public funding of doctoral studies in EU countries, and, in particular, the existing experiences in the region. An initial Working Group for funding was appointed at the PMB meeting at Crete, September 20th 2014. This Working Group made a detailed analysis of the current status of funding doctoral studies in EU countries, and faced with the fact that there are many different and very specific models of funding doctoral studies in different EU countries and at different universities. Comparisons with the actual situation in Serbia were done selectively, after choosing the cases in which parallelisms with the situation in Serbia are practically feasible.

Also, some indicators of different ways of financing are given in the book Doctoral Studies in Serbia.

Two bylaws formulated and adopted by the NCHE and MEST should be the outcome of the **Activity 1.5**.

An initial Working Group on Funding was appointed at the Project Management Board meeting at Crete, September 20th 2014. The Working Group presented the first draft of new regulations at the PMB Meeting on December 16th 2014. After a comprehensive discussion, it was decided to nominate a larger working group with representative of each university consortium member. The new Working Group continued the work and presented the Rulebook on manner of inclusion doctoral students in the scientific projects of the Ministry, at the Project Management Board meeting in Ghent, March 27th 2015 and at the Conference held in Novi Sad, April 3rd 2015. Draft Rulebook (last version) was analyzed at the Working Group meeting held in Belgrade on May 15th 2015.

The meeting was jointly organized by the two working groups: Working Group on Standards and Working Group for Funding. It was agreed to reduce the number of members of the working groups. The goal was to make the groups more operational and easier to finalize the draft documents.

All interested parties are invited, within 15 days, to submit comments and suggestions for improving the text. The Working Group on Funding should prepare final text, based on the suggestions received. Furthermore, the Working Group for funding should propose rules for other segments of the doctoral studies funding (quotas, scholarships and tuition fees), was agreed at the same meeting.

The Working Group on Funding did not finish the modified draft documents to June 01, 2015 (deadline for completion of Activity 1.5).

In reference to the **Activity 2.1** (Analysis of the research policiy in Serbia in the light of doctoral studies) be noted that in December 2014 the book "Nauka u Srbiji, 2010-2013" was issued and printed within the framework of the project. A critical analysis has been presented, including the main statistical indicators for the given period of time. One paragraph, entitled " Студенти докторских студија (Students of Doctoral Studies)" has been devoted directly to the topics of Activity 2.1

The Report on Activity 2.1 was available at the project site much earlier than specified in the Work plan.

**Activity 2.2** (Modification and adoption of bylaws on research policy) was launched much earlier than planned (1.9.20165). Academic staff of RODOS participated in the preparation of a Proposal for Amendments of the Law on Scientific Research Activity. The need for a program of co-financing of doctoral studies has been established by Article 2 of this document. The envisaged bylaws may be prepared and adopted when the draft law be definitely adopted.

Until June 1, 2015 **Activity 2.3** (Analysis of the role of industry and civil sector in doctoral studies) was carried out in accordance with the project application. The activity has been initiated in June 2014 at several meetings organized in the Chamber of Commerce and Industry of Serbia. At the PMB meeting held on December 4th 2014 it was decided, after a comprehensive analysis of all the relevant aspects, to start activity by launching a questionnaire addressed to all the members of the Chamber of Commerce of Serbia (more than 1000 addresses). The questions were formulated in such a way as to draw relevant conclusions for better coordination of the universities and research institutions with industry. Responses have been assembled and analyzed by a Working Group nominated by the PMB. The results have been presented and discussed at the Conference held at the Chamber of Commerce on April 23rd 2015.

After discussion, it was decided to organize two additional similar meetings in Kragujevac and Niš before September 2015. At the meeting of the Working Group for role of industry and the Working Group for Research policy, held in Novi Sad on the 6th of May 2015, the previous activities and documents were analyzed and plans for future activities adopted. It has been decided to focus on large companies which have an obvious need for sophisticated technology.

Some visits listed under the activity 1.1 were used for the presentation of the European experience in doctoral schools, which were planned within the **Activity 3.1.** 

A special session within the study visit to BOKU university, December, 2014, was devoted to the structure, programme and additional facilities offered by doctoral schools as a new approach of BOKU University to doctoral training programme. Meeting with co-ordinators of the doctoral schools of BOKU gave additional details of organisation, training and new opportunities for students within new structure in comparison to traditional doctoral programmes.

The study visit to Ghent university, March 2015, was specially focused to the experiences of Ghent university doctoral schools, as an example of additional doctoral training programme, encompassing both advanced specialist courses, related to the field of doctoral project, and transferable skills seminars preparing students for further professional carriers. The visit gave the opportunity to all Serbian consortium members to have detailed insight into basic goals and content of doctoral training programme, developed organizational structure of doctoral school, as very valuable experience in introducing new structures in Serbian practice.

In parallel with the above study visits, analysis of EU experience in the domain of doctoral schools was carried out on some meetings and conferences primarily devoted to other activities of the project.

At the common meeting of the National Council for Higher Education and the National Council for Research and Technology Development, Belgrade, December 4th, 2014, the topic related to doctoral school experiences in EHEA was a part of meeting agenda. The presentation PhD studies / Challenges and Dilemmas, summarized the analytical data on development of doctoral studies in Serbia, underlying the advantages of doctoral school implementation as an approach to harmonisation of Serbian system with European standards and practice.

In two papers presented at XX TREND 2015 Conference (Zlatibor, February, 23-26, 2015) the analysis of European experiences in doctoral schools was summarized. The papers: Quality Assurance in Doctoral Schools and Why Serbia Needs Doctoral Schools? Potential Models (authors RODOS team members) presented new trends in organisation and quality assurance of doctoral studies in the EHEA, with emphasis on structures of doctoral schools. The role of doctoral schools in the creation of an adequate research environment has been emphasized, including the achievement of a critical mass of researchers and new possibilities for learning transversal skills. Both papers are published in Conference Proceedings.

Taking into account the WP's 1 and 2, and deliverable 3.1, within the **Activity 3.2**, the Conference of the doctoral school was organized at the University of Novi Sad, on April 3, 2015. A comprehensive overview of European experiences was presented using different examples from EU universities (University of Ghent, BOKU University, University of Brussels, University of Luxemburg, University of Helsinki, University of Szeged, and some HEI's from France and Estonia), emphasizing the overlapping areas

of interest, with the aim to formulate roadmaps for the establishment of doctoral schools in Serbia.

Furthermore, at the Conference organized in the Chamber of Commerce of Serbia (Belgrade, April 23, 2015), one part of the discussion was devoted to the doctoral schools. The Conference gathered university staff, research staff, industry and administration. The presentation of doctoral schools experiences and general intentions based on versatile examples in Europe gained special attention of the auditorium. It initiated discussion supporting the idea of doctoral schools as a new structure underpinning the continuous contacts between employers and academic/research sector.

Report Analysis of European Experiences in Doctoral school was posted at RODOS Web site on May 31, 2015. The report summarizes the events carried out in the framework of activities 3.1 and 3.2, related to the current EU practice and experiences in doctoral school.

Bearing in mind that the activities 3.1 and 3.2 should be completed by January 1, 2015, and February 2, 2015, respectively, it is obvious that they are implemented mainly with delays.

The following steps have been taken in implementation of the **Activity 3.3**. Based on deliverables 3.1 and 3.2 launched the preparation of new accreditation standards for establishment of Doctoral Schools. The team of RODOS project has prepared a proposal for amendments to the Rulebook on standards for self-evaluation of higher education institutions. Guidelines on the establishment of doctoral schools are designed in Standard 15 and should be adopted by the National Council for Higher Education.

**Activity 3.4** was dedicated to training of the university staff on Doctoral School. In order to fulfil all the requirements resulting from deliverable 3.3 and support that activities, task force from Serbia, including academic and management staff and administration, paid training visits to the EU partners on Doctoral Schools. Attention was paid not only to the academic aspects, but also to the organizational and administrative aspects, of doctoral schools and recognition of joint doctoral degrees.

The following study visits were dedicated to training on Doctoral School, until June 01, 2015.

PhD Studies/European Experiences Some Examples was the topic of a special session of all Serbian Consortium members with the TU Crete delegation at the study visit to Technical University of Crete, September 2014. Based on an insight into basic European principles in the field of Doctoral studies, two examples of Joint Doctorates in Europe were presented as inter-institutional approach to high quality doctoral training: Joint European Doctoral Programme in Materials Science and Engineering and PhD Fusion Science and Engineering - Erasmus Mundus Joint Doctorate were analysed.

A special session of the agenda, within study visit to BOKU University, December, 2014, was devoted to the structure, programme and additional facilities offered by Doctoral Schools as a new approach of BOKU University to doctoral training programme. Meeting with co-ordinators of the Doctoral Schools of BOKU gave additional details of organisation, training and new opportunities for students within new structure in comparison to traditional doctoral programmes.

The study visit to Ghent University, March 2015, was specially focused to the experiences of Ghent University on Doctoral Schools, as an example of additional Doctoral Training Programme, encompassing both advanced specialist courses, related to the field of doctoral project, and transferable skills seminars preparing students for further professional carriers. The visit gave the opportunity to the participants to have insight into basic goals and content of doctoral training programme, and developed organizational structure of doctoral school.

The PMB has concluded (December 16, 2014) that **Activity 4.1** (Selected models for Doctoral Schools established) and **Activity 4.3** (Formulation of Selected Study Programs for Doctoral Schools) have to be merged and be considered as one unified general activity aimed at forming Doctoral Schools with selected study programs. The arguments for this conclusion have derived from the following considerations. Bearing in mind versatility of ideas connected to the establishment of doctoral schools, and particularly different conditions for their implementation at different universities and within different fields, pre-defining the general structure and related regulations may impose unnecessary restrictions and block the progress of implementation. This means that specific doctoral schools have to result from specific study programs, given at least in their draft form, and not vice versa.

An overview of a set of study programs representing candidates for doctoral schools is given in the Intermediate Report on implementation of this project (May 27, 2015).

- Doctoral School of Mathematics. Faculties of Mathematics of the Universities of Belgrade, Novi Sad, Kragujevac, Nis and Belgrade, together with the Institute of Mathematics of the Serbian Academy of Sciences and Arts, have an intention to make a doctoral school of mathematics, which would offer a set of courses taught by the best teachers in Serbia, and organize doctoral research projects supervised by the best researchers in particular domains. The School will result from a mutual agreement between different Universities, without any need for changing legal regulations. Students will enrol at the particular Faculties as earlier. Such a School would not require new or modified bylaws as a prerequisite. The joint study program was applied for accreditation to the Commission for Accreditation and Quality Assurance.
- Doctoral School of Arts. University of Arts in Belgrade, which is a partner in the project, has an intention to organize a Doctoral School of Arts, in which the particular Faculties (Music, Painting, Applied Arts, Theatre) will formally continue functioning as before, but in which transversal skills would be taught within the School, with an intention to better connect Doctors of Arts with real life and improve their carrier development.
- **Doctoral School of Artificial Intelligence**. This Doctoral School will be formed around the study program of Artificial Intelligence already accredited at level of the University of Belgrade (one of the results of the Tempus project INCOMING). Doctoral School will take care of supervision, which should be done in accordance with the results of DEV1, as well as of courses covering transversal skills, in order to make the whole study program more attractive for industry and contribute to the carrier development of doctoral students.
- Doctoral School of Bio photonics. This Doctoral School will be formed and accredited at level
  of the University of Belgrade. The School will provide high quality courses and supervision,
  together with transversal skill characteristic for the field of Photonics.
- Doctoral School for Material Science. This Doctoral School will be based on an agreement between the Faculties of Physical Chemistry and Electrical Engineering at the University of Belgrade, arising as a consequence of the intention to formulate a new study program in the field of Material Sciences and Nanotechnology. Students would formally enrol at the particular faculties. An agreement between the mentioned Faculties would provide a basis for improved supervision (multiple supervisors, education of supervisors) and for formulation of courses providing transversal skills. Realization of the plans does not require any modification of the existing Faculty/University bylaws.
- Doctoral School for Agriculture. Faculty of Agriculture at the University of Novi Sad will be the pivot of Doctoral School for Agriculture, which would incorporate Faculties of Agriculture at other Serbian Universities. The Doctoral School will give joint degree (the corresponding regulations will be considered within Activity 3.5.) The School will provide common laboratory space, high

quality courses and supervision, together with transversal skill characteristic for the field of Agriculture. This Doctoral School is of special interest for Serbia, having in mind the strategic importance of Agriculture.

- Doctoral School of Biology. This Doctoral School will be focused on the Faculty of Biology, University of Belgrade and the Institute for Molecular Genetics and Genetic Engineering, member of the University of Belgrade, as an example of a fruitful collaboration between Universities and Research Institutes. The Scholl will primarily take care of the laboratory facilities and research, trying to put together Faculty and Institute staff and to improve supervision. The Scholl will also take care of the organization of transversal skills needed for biologists.
- Doctoral School of Medicine. The envisaged Doctoral School will take care primarily of transversal skills, by organizing specific courses for all doctoral students at the Faculty of Medicine, University of Belgrade, which is by far the largest faculty at the University of Belgrade with many different Divisions (study programs). It will also organize supervision in a more efficient way.

**Activities 5.1 and 5.2** are closely related to each other. Therefore, it is rational to analyze them together.

Composition of Committee for Quality Control and Monitoring (CQCM) was proposed at the project kick-off meeting on March 3, 2014, and verified at the Project Management Board meeting in Belgrade on June 14, 2014.

The first meeting of the CQCM was held on July 2-4, 2014 in Ghent. The Questionnaire on doctoral studies in higher education institutions was adopted at that meeting, and was distributed to all interested parties.

The second meeting of the CQCM was held on October 14, in Belgrade.

Based on the response after completed the Questionnaire on doctoral studies in higher education institutions results have been presented at the Conference RODOS PhD studies in Serbia, held on 4 December 2014.

The Quality Control and Monitoring Plan was the first document adopted in the framework of the WP 5, at 3rd meeting of the CQCM on March 24 and 25, 2015 in Ghent. Furthermore, at the same meeting the Project evaluation form and the Event evaluation form have been adopted.

First of all, comparing the part of the project application for WP5 and the Quality Control and Monitoring Plan, it is clear that in the second document, there is no almost any additional value (in terms of concrete planning), compared to the first one. In this sense, the document is too general one, without a more concrete plan for implementation of the activities. Possible conclusion from the document is that it provides only a general framework, but it is expected from the CQCM to prepare more concrete action plan.

The First Year Evaluation Report was completed in May 2015. It gives a detailed presentation of the results obtained on the basis of completed the project evaluation forms, provided by the project partners. The Report is available on the project web site. This Report was presented at the study visit in Lisbon on May 23, 2015. For the external evaluation is required underline the following part of the agenda.

"Study visit University of Lisbon (Instituto Superior Técnico) Lisbon, May 20-23, 2015

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- 10:00 Project goals and achieved results. Prof. Srdian Stanković
- 11:00 Partners view on the achieved results
- 12:00 Coffee Break
- 12:30-16:00 Facultative faculties visits

#### May 23, Morning Session, Room tbc

- 10:00 Project self-evaluation after first year 10:30 Tendering procedure for equipment
- 11:00 Intermediate Report and EACEA Monitoring visit
- 12:00 Coffee Break
- 12:30 Closing meeting"

Thus, the results achieved and partners view on the achieved results of the project were presented and discussed on May 22, 2015. Thereafter, the next day, the results summarized in this report are presented ("Project self-evaluation after first year").

From the above comes a conclusion, the outcome the First Year Evaluation Report had not been a basis for verification of the results achieved. Furthermore, also follows that the measures to improve the workflow of the project on the basis of an objective analysis summarized in the Report had not been considered. This is not in line with the basic principle of quality assurance (analysis based on evidence).

The main achievements related to the **WP6 Dissemination of the project results,** until June 1, 2015 are:

- Website and web portal created
- Website and visual identity of the project created
- Email accounts created
- Regular communication with project stakeholders (with main focus on student representatives) and public audiences.

Regarding the latter, it should be noted that through shared activities in work packages an extensive network of organizations and individuals engaged in the project has been established. It presents a hierarchical network structure that links all levels of higher education and stakeholders in Serbia. Continuously dissemination on the project activities to all stakeholders of higher education in Serbia was done via this network. Dissemination of information on the project activities continuously carried out through this network, to all stakeholders of higher education in Serbia.

In parallel to the previous activities, it is important to emphasize, that the dissemination on the project results carried out almost continuously through direct contacts with all stakeholders. To illustrate, I remind on the previously mentioned events: several meetings organized in the Chamber of Commerce and Industry of Serbia (from June 2014 to April 2015); the RODOS conference entitled "Doctoral Studies in Serbia", December 4th 2014 in Belgrade; Conference held in Novi Sad, April 3rd 2015; XX TREND 2015 Conference, Zlatibor, February, 23-26, 2015).

Furthermore, the books "Science in Serbia, 2010-2013" (published in December 2014) and Doctoral Studies in Serbia (published in February 2015), and two papers presented at XX TREND 2015 Conference remain as a permanent means of long-term dissemination of the project achievements.

Although it is too early to draw conclusions about **WP7 Sustainability of the project results**, activities which can be a good basis for it are visible from above. As already mentioned, strong connection of all interested parties is established. At the highest level of that network are networked bodies responsible for higher education in Serbia. This primarily refers to the the Ministry of Education, Science and Technological Development; the National Council for Higher Education; the National Council for Science and Development; the Conference of the Universities of Serbia, the Commission for Accreditation and Quality Assurance. Also, the Conference of the Universities of Serbia included other universities of Serbia in the project activities, together with partner universities. The Serbian Academy of Sciences and Arts, the Chamber of Commerce and Industry of Serbia and the Association of PhD students and young researchers of Serbia provide an important support to the project. Furthermore, almost all persons with the power to make important decisions for Higher Education of Serbia are actively involved.

Preconditions for sustainability of the project results have been created by engaging of all mentioned participants.

Work Packet 8 was dedicated to **Management of the project**. The Project Management Board was established at the kick-off meeting with representatives (nineteen) from all partner Institutions. At the same meeting, it was agreed not to form a Steering Committee. The Management Board will carry out tasks of a Steering Committee planned in the Work Plan. PMB had four meetings in accordance with the Work Plan (one PMB meeting and two SC meetings per year were planned).

In the project application is planned that PMB will have meetings "where the planned and the achieved activities are analyzed based on reports from all the consortium members and the lead partners of the work packages". Furthermore, it is also planned, "Minutes with conclusions from the meetings will be distributed among the partner institutions and available at the project website". Unfortunately, there are no such reports or minutes of the PMB meetings.

## Conclusions and recommendations.

After a year and a half of the project implementation, the progress of the project activities against the implementation schedule can be assessed as quite well, although some delays are observed and indicated in the text. However, it should be kept in mind that the real start of the project was a bit delayed. In addition, the project consists of a range of different and demanding activities under each work package. In some cases, planned activities could not be accomplished in scheduled time as they were enlarged compared to the plan. Enlargement refers to the scope of activities and number of participants.

Looking at the postponed deliverables, it can be concluded that at the moment, these delays are minor and do not pose a risk for the project overall results.

On the other side, it is important to stress that several activities impressively exceeded the initial work plan (by volume and depth). This primarily relates to activities in the preparation, promotion and distribution of the book "Doctoral Studies in Serbia". The book presents an evidence-based, transparent, unique and

comprehensive overview of the situation, with indicated strategic directions for improvement of doctoral studies in Serbia.

The conference held in December 2014, is another very successful activity. Aside from being an excellent promotion of the previous book it brought together representatives of all higher education institutions in Serbia.

Given the number and composition of participants, there is no doubt that the Conference at the right time put a crucial topic - "Doctoral Studies in Serbia" on the agenda, with the consent of the entire higher education in Serbia. At the same time it was an excellent way to disseminate information about the project results and to establish support for sustainability.

However, based on the analysis of activities undertaken so far, there are some issues that require concern in order to ensure proper, smooth and timely implementation of the project.

I recommend reconsideration of the PMB decision (December 16, 2014) concerning WP4: "... in spite of theoretical advantages of pursuing the top-down approach, which starts from general structures and related regulations and ends up with implementation of specific study programs, the inverse bottom-up approach has been found to be more adequate..."

In the reconsideration one should bear in mind that the main objective of the project is the reconstruction of doctoral studies in Serbia and to propose new system of doctoral studies. In other words, to prevent the establishment of a number of different study programs or doctoral schools, without having defined the baseline principles at the national level. Further on from the statements in the Intermediate Report on implementation of this project (May 27, 2015) "versatility of structures and ideas connected to the establishment of doctoral schools and different conditions for their implementation at different universities and different fields within" is even more apparent urgency to develop clear guidelines on the future organization and the method of implementation of joint doctoral studies at the national level.

If several doctoral schools and/or study programs were established (proposed under Activity 4.3), without previously defined new system of doctoral studies, it would likely incur a number of different models, and presumably incompatible models. This would be contrary to the main objective of the project. To avoid this risk, Activity 4.1 and Activity 4.3 should be harmonized, but in such a way that Activity 4.1 be implemented a few steps ahead of Activity 4.3.

For the evaluation and improvement of the project's activities, particularly significant are the obstacles that the partners encountered when implementing project activities. In the First Year Evaluation Report the obstacles and weaker points are listed. In this context, the part that refers to the analysis of the implementation of the project activities/deliverables is particularly important. In this part of the survey "among the obstacles that the partners encountered when implementing project activities were contextual issues (economic crisis, legal framework, low effectiveness due to autonomy of faculties, lack of integrated structures), issues related to the structure of the project (insufficient finances for project partners, lack of common understanding about the structure of doctoral studies), and issues related to the management of the project (unclear budget rules, delay of activities, lack of communication with project partners, lack of clear calendar of activities, unclear delegation of tasks and assignments)".

Also, in the part of the report related to the management of the project has been written, "There is some minor criticism on issues related to communication and conflict management. Both the coordinator and the different partners will have to stay alert to take up their duties during the next years of the project. All partners seem to be confident that conflicts can be solved should they arrive".

Furthermore, it is important to note that the partners (about 5%) answered "strongly disagree" only to answer offered "The Management Board meetings are usually concise and informative."

The consortium members should consider in detail and verify all of the above claims, from the First Year Evaluation Report. Based on that, should be given recommendations for mitigating or eliminating obstacles to more successful implementation of the project.

In addition, there are other indicators (less important for the project) the internal monitoring of the project was not carried out continuously.

- Lack of evaluation reports and questionnaires about the quality of various events implemented within the project.
- Also, a number of documents relating to the activities of the project do not have indicated basic information about their history and status. More specifically, there is no information when and from whom they have been prepared, reviewed, adopted and /or approved.
- Furthermore, there are no minutes of the meetings held within the framework of the project (PBM, CQCM,...).

Internal monitoring of project activities should PMB and CQCM perform together and continuously, to avoid mentioned disadvantages.

Banja Luka, June 2015