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University of
Belgrade



**Implementation of Dual Education in Higher Education of
Serbia**

Kraljice Marije 16, 11120 Belgrade 35, Republic of Serbia

email: nzrnic@mas.bg.ac.rs



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Dissemination and exploitation plan

Deliverable 6.1

contacts:

Prof. Dr.-Ing. Nenad Zrnić, tel: +381-63-287-193

Dr.-Ing. Žarko Mišković, +381-64-18-32-989

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Abstract	This document contains dissemination and exploitation plan. It describes activities and strategies of all participating partners in dissemination and exploitation.
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The DualEdu Consortium:

1. **Coordinator:** UNIVERSITY OF BELGRADE, SERBIA, UB

Partners:

2. FH JOANNEUM UNIVERSITY OF APPLIED SCIENCES, AUSTRIA (FHJ)
3. FORMASUP, FRANCE (FORMASUP)
4. UNIVERSITAT DE LLEIDA, SPAIN (UDL)
5. UNIVERSITY OF SOCIAL SCIENCES IN LODZ, POLAND (SAN)
6. POWMIO GMBH, GERMANY (POWMIO)
7. BELGRADE METROPOLITAN UNIVERSITY, SERBIA (BMU)
8. UNIVERSITY OF NOVI SAD, SERBIA (UNS)
9. UNIVERSITY OF KRAGUJEVAC, SERBIA (UNIKG)
10. UNIVERSITY OF NOVI PAZAR, SERBIA (SUNP)
11. SCHOOL OF ELECTRICAL AND COMPUTER ENGINEERING OF APPLIED STUDIES, SERBIA (VISER)
12. THE MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGICAL DEVELOPMENT OF THE REPUBLIC OF SERBIA, SERBIA (MPNTR)
13. THE NATIONAL COUNCIL OF HIGHER EDUCATION OF THE REPUBLIC OF SERBIA, SERBIA, (NCHE)
14. NIS CLUSTER OF ADVANCED TECHNOLOGIES (NI-CAT)

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1. About this document: Information on the Dissemination and Exploitation Plan

This Information on the Dissemination and Exploitation Plan is aimed as an integral part of the project "Implementation of Dual Education in Higher Education of Serbia / DualEdu" that includes project's goals and activities, project partners' profiles description, their dissemination competences, as well as presumable dissemination channels, strategies and methodology.

"To disseminate" means to spread information, knowledge, opinions widely. „Dis-„ derives from Latin word meaning „abroad“, and „semen“ or „semin-“ derives from the Latin word for seed; the idea with disseminate is that information/knowledge/opinion travels like seed sown by a farmer. Among academics dissemination is considered as a disclosure of the research results to the wide public (both professional and non-professional) by all appropriate means using all possible strategies, mediums and channels, which includes but is not limited to scientific publications.

Dissemination and Exploitation Plan defines how both tangible and intangible project outcomes can be implemented, what impact they will likely to have on every particular stakeholder, and how they will influence the educational market. It describes in detail the dissemination activities planned by the DualEdu consortium, including all important aspects of planned dissemination activities. Dissemination and Exploitation Plan also defines phases of dissemination, and presents planned material and tools to be prepared in order to disseminate project outcomes information. It aims to define the dissemination goals, as well as the DualEdu project's target audience and channels through which the project results will be promoted. Finally, Dissemination and Exploitation Plan involves the partners' competences in the area of dissemination and a scheduled activities' timetable. The leader of WP6: Dissemination and

Exploitation of Results will be University of Novi Sad (UNS). It will be in charge of development and maintenance of project web portal, social media (Facebook, LinkedIn, YouTube) profiles and organization of dissemination events.

Bearing in mind that both starting and ending phases of the project DualEdu are of great significance from the point of view of dissemination and exploitation, project Dissemination and Exploitation Plan is formulated as a guide toward the envisaged project outputs. However, the project itself is not restricted to this very document (Dissemination and Exploitation Plan), i.e. planned activities regarding dissemination would possibly be constantly revised, re-examined, and improved by additional actions, activities and measures undertaken by project partners throughout the project life-cycle.

Apart from introductory parts and conclusion, this report consists of the following chapters:

- Dissemination overview, that consists of the following sub-chapters:
 - Project objectives and activities – that illustrates project identity, activities, objectives, and identifies target groups of project outcomes and the end users envisaged;
 - Project partners' profiles and dissemination competences – that briefly introduces partners that participate project DualEdu.
- Dissemination channels – where channels that will be used in dissemination process will be explained and presented in details.
- Dissemination activities and dissemination strategy – that describes and explains dissemination strategy and consequent activities (planned events) that need to be undertaken in order to achieve set strategy. It mainly sets plans for communication material to be produced for promotion of project results e.g. mailing lists, electronic Newsletter, reports, events' agenda, minutes of meetings (both online and F2F), articles on specific topics, presentations at conferences and meetings.
- Target groups and different stakeholders.
- Dissemination methodology.

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- Definition of responsibilities – that defines responsibilities of each partner in the area of dissemination and exploitation, i.e. the agreed dissemination plan that should address problems regarding project outcomes.

2. Introduction

Dual education (DE) does not exist in current Serbian higher education (HE). Development of dual educational system is strategic goal of the Republic of Serbia, as it is perceived as an action which will contribute to the further development of the Serbian economy.

The project DualEdu was initiated between the representatives of Ministry of Education, Science and Technological Development of Serbia (MESTD) and members of Serbian academic community and is based on the necessity to broaden the dual education concept from secondary to higher education. The Consortium members were chosen based on their competence and previous cooperation on similar Erasmus+ projects.

The unemployment rate amongst young people between 19 and 30 years in Serbia is very high, namely above 35%. The cause of high youth unemployment rate lies in the fact that the work experience is the decisive factor for the employers. The graduates are mostly without any work experience and this disables them from getting a job thus capturing them in the unemployment - no experience circle. The employers rarely recognize the graduates' degree of competence even when they are completely suitable for the position.

There is an ongoing initiative conducted by The Serbian Government to implement dual secondary education that is recently spreading towards higher education. There are also many retraining/additional training programs conducted by The National Employment Agency of Serbia in order to reduce the unemployment rates between surplus occupations, but the sustainable solution for the youth unemployment problem is to develop the study programs and education models based on the labor market demands. This is particularly important for

attracting investments since the investors demand not only positive business climate but also highly trained workforce that can be produced fast enough through flexible DHEM.

This proposed project targets the main issues concerning the employability of students and graduates which is in line with national strategy for increasing the employment rate of young population. The project is also in line with Regional Priorities for Joint & Structural Projects (Erasmus+ KA2 – Capacity Building in Higher Education) for the Region 1 (Western Balkan) and is related to:

1. Category B: Learning and teaching tools, methodologies and pedagogical approaches: The project proposes a new approach in Serbia to making the HE programs more professionally oriented with emphasis on offering the exact working skills to the students.
2. Category D: Non-University sector at tertiary education level: The DHE studies are intended to be mainly professional and one of the project outcomes is to define the obligations between HEI and student, student and employer and employer and HEI.
3. Category D: University-enterprise cooperation, entrepreneurship and employability of graduates:
 - a. The DHE connects the employers that request particular set of skills with students that have strong propensity and potential to acquire that set of skills.
 - b. The DHE gives the students an opportunity to acquire much needed work experience before graduation which in turn enables them to be more competitive on the labor market.
 - c. The DHE implementation requires from the HEIs to develop such study programs that are highly compatible with students' future profession and altogether create a teaching ambience similar to that of a workplace.
4. Category D: Definition, implementation and monitoring the reform policies: The project will provide the legislation background for establishing currently non-existent DHE studies in Serbia.

Up until now the HEI in Serbia based their endeavor to increase the graduates' employability on modernizing and adjusting study programs in order to transfer the knowledge that they supposed was required by the employers without including them into the study program development process. That didn't bring the expected results in making the graduates attractive enough on labor market. In the countries that adopted the DHE some significant results in resolving the problem of youth unemployment are shown. This is why the establishment of DHE in Serbia was chosen as the aim of this project.

3. Dissemination overview

Partners in DualEdu consortium were chosen on the basis of their complementarities, competences and previous successful cooperation in the similar projects. There are 14 partners involved in the project implementation, including: 6 HEI from Serbia (UB, UNS, UNIKG, BMU, SUNP, VISER), 4 HEI from the EU (FH Joanneum Gesellschaft M.B.H. from Austria, Formasup (Région Hauts-de-France) from France, Universitat de Lleida from Spain, University of Social Sciences in Lodz from Poland), 2 national institutions in HE system in Serbia (MESTD – Ministry of Education, Science and Technological Development of the Republic of Serbia, and NCHE – National Council of Higher Education of Republic of Serbia), PowMio company from Germany and NI-CAT cluster from Serbia.

As the project should contribute to general and comprehensive improvement of HE system in Serbia, six HEIs from Serbia are selected on the principles of geographic dispersion (from all major regions of the state), ownership type (both state and private universities are involved), and educational type (both universities and schools of professional studies are involved). They are involved in all working packages (WP) and project teams at these HEIs consist of people specialized in different relevant areas and with great professional and organizational experience. The biggest among them, University of Belgrade will be the project coordinator.

Since project results have strategic national significance for Serbian HE system, partners list from Serbia includes major HE system's institutions with policy-making mandate (MESTD and NCHE). With its influence and power of decision making they will provide the project results implementation and sustainability.

Chosen EU partners are selected according to their specific expert knowledge and experience. Important factor in choosing partners from EU was the need to have partners with developed dual educational programs and to have partners from different EU countries with developed dual education systems. Expertise and competences of these partners in the field of dual education will be crucial for proper knowledge and experience transfer to Serbian HEI.

Coordination among partners in the implementation phase will be provided through team work, IT communication, personal meetings and conferences. Frequent on-line communication makes project communication up-to-date and efficient.

3.1. Project objectives and activities

DualEdu has three main project objectives, which are as follows:

1. Flexible and generic Dual Higher Education Model, developed aiming maximal effectiveness of collaboration between HE students, HEIs and companies in Serbia
2. The legislative framework, needed for establishment of Dual Higher Education Model in Serbia
3. Pilot implementations, needed to test proposed flexible Dual Higher Education Model with its variants.

The consortium will develop flexible Dual Education model according to existing dual education models in EU and worldwide. For establishment of legislative framework, achieved results from Erasmus+ project CWIHE (European Network of Cooperative and Work Integrated Higher Education) will be significantly important. Two partners of CWIHE project are planned to be in consortium of this project. With other participating institutions they will be involved in the development of the most optimized Dual Higher Education Model, its variants and derivatives for Serbia, according to specificities of collaboration scenarios between DE students, HEIs and companies. To achieve this, the consortium will consult representatives of all identified

stakeholders in order to identify their needs, expectations and requirements of Dual Higher Education in Serbia.

The consortium will propose the legislation framework according to the best foreign practices and gained experiences. In that process, the involvement of Ministry of Education, Science and Technological Development (MESTD), together with NCHE will be crucial for establishing of amendments to the Law on Dual Education, Law on Higher Education and amendments to the Accreditation Standards.

Collaboration and synergy of pilot testing will provide a comprehensive analysis of the proposed concept of Dual Education in Serbia.

The following stakeholders at different levels of impact are:

1. Local impact:

- a. Students: Cooperation with local companies, with perspectives for employment after graduation.
- b. HEIs: Intensive contact with local companies with perspectives of professional courses, advising businesses and practical research.
- c. Companies: Local companies cooperate with nearby students with employment perspectives after graduation.

2. National impact:

- a. Students: Student receives funding during period of study.
- b. HEIs: Less students drop-out.
- c. Companies: Employment of the most qualified and specifically trained young trainees reduces the recruitment costs. Also through close cooperation with HEIs, the innovative potential of the company could be increased. It may result in further expansion of business activities.

3. Regional impact:

- a. Students: Because of small linguistic differences, students from some neighboring countries may find their interests to study within Dual Higher Education Model in Serbia.

b. HEIs: Increase in number of students and contribution to reputation of HEI in the region.

c. Companies: Companies in the region may employ highly trained people with no language barriers.

4. European impact:

a. Students: Better perspective of finding a job because of gained practically oriented qualifications and possibilities of enrolling some of harmonized programs of dual education in Europe.

b. HEIs: Introduction of EU models in educational processes of HEIs in Serbia.

c. Companies: Companies in Europe may employ highly qualified manpower, educated by model that is consistent to EU labor market needs.

After the project is finished, the target groups of stakeholders and participating institutions will be reached using the following channels of communications:

1. **POTENTIAL STUDENTS:** A special web site will be created for Dual Higher Education (DHE) in Serbia. All HEIs will be asked to announce their programs of DHE. This site will be promoted at the end of the project and will be constantly updated with relevant information about DHE in Serbia. Also, through the web site potential students will be informed about benefits of DHE. Other types of advertising will be realized by Facebook, LinkedIn, YouTube channel, as well as via flyers and posters, which will be widely distributed.
2. **HEIs:** All HEIs in Serbia will be informed about the project outcomes. They will get the proceedings of the Final Conference, with all DHE specification documents, report of the pilot implementations and implementation guidelines.
3. **COMPANIES:** Companies who are interested in perspectives, achieved results and the latest information about DHE will be informed through DualEdu website about new Dual system of Higher Education in Serbia, with list of already established cooperation programs and with the list of perspective study programs in HEIs that are suitable for certain business activities.

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4. **MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGICAL DEVELOPMENT (MESTD):** As one of project partners, MESTD will provide support to the development of a flexible and generic Dual Higher Education Model (DHEM) for Serbia and will prepare the draft legislation documents to be adopted by the Government of Serbia and the Parliament (for the Law on Higher Education, on Dual Education etc.). At the end of the project MESTD will put all relevant information about DHEM on its website, as it is a usual practice for all kinds of studies in Serbia. Through continued collaboration with companies, HEIs and other stakeholders, MESTD will continuously supervise implementation of DHEM.
 5. **NATIONAL COUNCIL OF HIGHER EDUCATION (NCHE):** As a project partner and authorized by Law for setting accreditation criteria, NCHE will establish the accreditation standards for DHE in Serbia. Through cooperation with HEIs and MESTD, NCHE will monitor implementation and results of DHE in Serbia.
 6. **ACCREDITATION COMMISSION:** The consortium will inform the Accreditation Commission about the proposed accreditation criteria for DHE studies, as one of outcomes of the project. The Accreditation Commission will be invited to participate in the Final Conference and discussion forums in order to be involved into the process of establishing accreditation criteria.
 7. **NATIONAL EMPLOYMENT AGENCY:** It will be invited to the Final Conference in order to be informed about the benefits that Dual Education studies may have on the employment. Its interest is to disseminate information about DHEM, as well as to co-finance certain target groups of students. Through the developed web site National Employment Agency will be informed about changes in offered DHE programs.
 8. **GENERAL PUBLIC:** All HEIs and companies involved in DHE system will promote DHE and provide appropriate marketing campaigns, as this is in their interest. Sooner or later, general public will be informed about this new kind of studies. We expect that mass media will show the interest for Dual system in Higher Education in Serbia.

3.2. Project partners' profiles and dissemination potential

Carefully selected partner-institutions that constitutes DualEdu consortium involves different participants, having the wide variety of competences, which will be useful at different stages of the dissemination process and will be utilized within the dissemination activities undertaken. Among these competences the following need to be highlighted:

- Previous experience in performing dissemination activities;
- Possibilities and previous experience to organize seminars, courses and workshops related to project aims and objectives;
- Possibilities of participating in relevant events, where project outcomes will be presented;
- Long-term professional relationships and contacts which can be used in searching for relevant target audience (e.g. to send them newsletters, leaflets etc);
- Own numerous professional publications, media and other resources.

1. Coordinator: UNIVERSITY OF BELGRADE, UB

The University of Belgrade is the oldest university in Serbia and the largest in this part of Europe. Founded in 1808, it consists of 31 faculties (among them 11 in the field of engineering), 11 research institutes, 13 University centers, Computer Centre and the University Library with more than 3.500.000 volumes. It provides education in sciences and mathematics, technology and engineering sciences, medical sciences, social sciences and humanities, with 340 study programs, over 95.000 students and 5.000 academic and research staff, 3,696 papers in 2014 on SCI, SSCI and AHCI lists, numerous publications and scientific and research projects. The University has 11 endowments and 7 funds for supporting the best students. Intensive capacity building for scientific research results in over 300 doctoral theses per year. One of the basic priorities of UB through its Strategy of internationalization is the establishment and the development of cooperation with international organizations dealing with the issues of higher

education. UB has a very intensive cooperation with Serbian and regional industry. A very important result of this cooperation represents the skill praxis that UB students take at domestic companies to get real-world experience in the major field of studies (skill praxis is mandatory in most of the curricula at UB). Many students work on parts of their B.Sc. and M.Sc. theses in companies where they solve real-world practical problems. An additional effect of industrially based thesis is that students get acquainted with company procedures and prepare for future employment. Finally, UB faculties utilize problems from industry for formulation of project topics for courses that include project design in syllabus.

Applicant organization UB, as the biggest institution with the longest tradition and highest expertise capacity of all Serbian HEIs will be the project coordinator, responsible for the overall financial and administrative management of the project activities in close cooperation with other partners. UB will provide complete coordination of work and mobility of consortium staff members. UB will be the leader of the WP7, Project management. Additionally, UB will participate in all other WPs: - Research and needs analysis, WP1 (Preparation) - Flexible and generic Dual Higher Education Model (DHEM) for Serbia, WP2 (Development) - Creation of Legal and Other Conditions for Implementation of DHE in Serbia, WP3 (Development) - Pilot testing of the flexible and generic DHEM, WP4 (Development) - Quality Assurance and Monitoring, WP5 (Quality Plan) - Dissemination and Exploitation of Results, WP6 (Dissemination and Exploitation)

2. FH JOANNEUM UNIVERSITY OF APPLIED SCIENCES (FHJ)

With currently more than 40 highly specialized degree programs in the 6 departments (applied computer sciences, engineering, health studies, building| energy & society, media & design, management) 530 employees and more than 800 affiliated lectures FH JOANNEUM is one of Austria's leading universities of applied sciences. FH JOANNEUM considers the production of knowledge and passing it on, as well as research and training, as processes, which are inseparably connected with each other. These are integrated activities, which enrich and strengthen each other. FH JOANNEUM is a university of applied sciences committed to stimulating innovation through R&D in order to meet sustainability goals and societal needs in

line with the principle 'from idea to implementation'. Against this background, research and development is a prerequisite for the internationally recognized education provided by FH JOANNEUM, which is based on permanent transfer of knowledge between teaching and R&D. Production Technology and Organization (PTO) and Engineering and Production Technology at the Institute of Applied Production Technologies (IAP) of FH JOANNEUM have been the first cooperative (in German "dual") study programs in Austrian Higher Education . (Students are assigned to a partner company during the program and alternate theory semesters with work terms, with a duration of three to six months each, throughout their education). This specific competence in Work Based Education has led to numerous project partnerships, membership in international bodies in this field like the World Association of Cooperative Education (WACE) and conference presentations and organization (f.e. WACE 8th International Symposium on Work Integrated Learning, June 2010 in Graz).

Through many years of direct experience as well as the participation in research projects the IAP has expertise in the specific pedagogical and organizational implications for the different options of WBL (work based learning) and WIL (work integrated learning) within higher education and possess first results towards a common framework for strategic development and quality assurance at the implementation of co-operative programs in secondary and tertiary education. Due to its high experience in the field, within this project FHJ will be the leader of WP5: Quality Assurance and Monitoring. In addition, FHJ will take active role in all work packages. In WP1 (Research and needs analysis) FHJ will host study visit of staff members from Serbian partner organization to transfer the experiences in dual higher education.

3. FORMASUP (FORMASUP)

Formasup in the Hauts de France region is a vocational training centre which gathers universities and high schools, both commerce and engineer schools. Formasup includes 4300 apprentices in the high education and delivers more than 120 degrees from the technician level to the master level, including engineer level among 40 high education institutions. It covers a large variety of sectors, such as the industrial field, commerce, law, communication, politic sciences, etc. It is an association created in 1992 with 3 major academic training centers in the

industrial area. The apprentices are enrolled in partnership with 2500 companies. The purpose of this structure is to promote the WIL (Work Integrated learning) under contract and thus to improve the collaboration between the academic training centers (universities, schools), the firms and the French authorities (regional administrations and organizations). We stress on the fact that FORMASUP provides a professional qualification that confers further education degree. With implied educational professionals and motivated companies, it makes it possible for young adults to acquire a diploma, with qualification as well as professional experience. To achieve this goal, FORMASUP promotes the development of pedagogical tools in order to improve this acquisition of abilities through work experience. Such tools connect the 3 actors of the training: apprentice, company mentor and school tutor. With respect to this framework, the apprentice is both a student and an employee with a work contract. Such a system is a plus for learners to get acknowledged degree which is the same as the one by the conventional education system but based on another learning process. Good results were achieved. Indeed WIL allows the apprentice to develop his competences and improve his employability, gives the company the opportunity to recruit a young who already knows the industrial field, improves the ability of the training centre to form on a quality basis.

Formasup has developed a leader position in the framework of WIL in France (and belongs to the ANASUP network which gathers the vocational training centers in the high education in France; and Mr Frédéric Sauvage is the Vice President of ANASUP). It has acquired an expertise in introducing this particular way of learning among the universities and high schools; this expertise is identified at each step of the implementation. As a result, Formasup has the ability to give the tools for implementing WIL in another country. Moreover, Formasup, by participating in a Cooperative and Work Integrated Higher Education project, wrote a handbook for policy recommendations. In DualEdu project Formasup will be the leader of WP1 (Research and needs analysis) that will include the Analysis of EU and worldwide practices and experiences in the DHE. It will host a study visit of Serbian partners' staff to transfer its knowledge in the field of the development of pedagogical tools for DHE. In addition, Formasup will be involved in all work packages. Special contribution is expected in WP4 during the generation of specific DHEMs.

4. UNIVERSITAT DE LLEIDA (UDL)

The University of Lleida is a part of the public university system of Catalonia. It has about 11.000 students including undergraduate, master and doctorate levels, covering a wide range of knowledge fields, from health sciences and medicine, agronomics, law and economy, educational sciences, humanities and engineering. Its research specialization fields are agro food technology, bio medics, sustainable technology and social development. It has about 600 faculty members. We provide high standards of teaching with quality services throughout the university community that reach society beyond the campus gates. Students make up most of the UdL community, and our objective is to ensure that they enjoy the teaching and learning processes involved. They will thus be able to develop both at a professional and personal level by following other educational, cultural or leisure activities, and by participating in the UdL to keep it a lively, ever-improving educational institution. The UdL of the 21st Century is an entrepreneurial university that promotes a comprehensive educational model. It caters for the requirements of different educational contexts through its involvement in the development of initiatives to ensure all students have the basic skills, the ability to think for themselves and the tools needed to deal with life as citizens in an ever-changing social arena. In 2013, the University of Lleida adopted its new strategic plan 2013-2016. With the aim of improving the employability of our students, one of the main pillars of the strategic plan is precisely the promotion and development of work integrated learning for graduate and Master programs. To this end we have created a Commission for the development of coop programs, chaired by the vice-rector of Planning, Innovation and Entrepreneurship and supported by the Social Council of the University of Lleida and the Foundation of the University of Lleida. As a result, during 2012-2103 the first studies on work and training in higher education were implemented through a pilot program training primary teacher in partnership with the Department of Education of the Generalitat of Catalunya. All the educational programs are certified by AQU (Catalan Agency for University Quality) and ANECA (Spanish Agency). It has a quality system certified by AQU.

At present, the UdL offers the degree in Primary School Teachers, master in Informatics Engineering, master in Industrial Engineering, master in Agricultural Engineering, master in Operations and Distribution and master in Human Resources. UDL will be involved in all work packages within this project. It will give particular contribution to the Project through the transfer

of its experience gained in establishing dual education programs specially in the field of informatics engineering where UDL has gained good experience in the creation of the dual program, relations with companies, managing tutors, supervising students and assessing the work in the companies. This experience will be peculiarly important for WP2 (Flexible and generic Dual Higher Education Model (DHEM) for Serbia) and WP4 (Pilot testing of the flexible and generic DHEM). In addition, UDL will be the host of Serbian partners study visit during WP1.

5. UNIVERSITY OF SOCIAL SCIENCES IN LODZ (SAN)

University of Social Sciences (SAN) is the largest private university in Poland, with more than 20 years of experience. We provide high-quality education to students from all over the world. The University offers a wide range of Bachelor's and Master's programs in major cities in Poland and in the branch campus in London. Our offer also includes MBA and PhD studies and a unique American Master's degree program in cooperation with Clark University. Our goal is to equip students and graduates with specialist knowledge and practical skills needed in the 21st century's labor market, both at the local and international levels. Therefore, all of our programs are developed in close cooperation with partner companies and institutions and provide students with an opportunity to participate in internship programs and various projects in a real-world business environment. Dual studies, which offer the possibility of combining traditional education at a university level with acquisition of practical professional competencies in companies, are the model gaining in popularity. SAN follows these trends and develops cooperation in the scope of dual international studies that enable students to gain practical knowledge and professional competencies based on academic education in the country and at foreign partner universities as well as work in international companies. SAN employs top class academic staff to provide high quality study programs both in Polish and English. Our educational programs reflect the needs of rapidly changing world, taking into account the needs of the labor market. As an educational organization we cooperate with more than 150 universities/organizations abroad and our didactics from various departments have been involved in more than 90 international projects so far. As an educational organization our SAN

promotes a multidisciplinary approach, bringing together researchers from a diversity of backgrounds (economics, humanities, engineering, etc.).

The University of Social Sciences has got vast experience in cooperation with foreign universities and entrepreneurs running companies in the EU, which is an important element of the University's potential within the internalization of academic education and its direct connection with the actual needs of the economy and the job market. SAN has the potential to provide support (according to specific roles and tasks assigned within the consortium) to project's activities having an immense expertise and experienced staff in respective field. Within this project, SAN will be involved in all work packages. It will host a study visit of staff members from Serbian partner organizations. Special contribution of SAN is expected in planning of survey on companies needs in Serbia (design of questionnaires and contents of interviews with management) in WP1 (Research and needs analysis), as well as in the analysis of the results of pilot testing in WP4 (Pilot testing of the flexible and generic DHEM).

6. POWMIO GMBH, GERMANY (POWMIO)

PowMio GmbH consists of highly-educated software engineers with over 15 years of joint experience in developing cutting edge software for SAP SE. Its team worked on both back-end and frond-end development of solutions, including mobile, web and standalone applications. PowMio GmbH's passion is to deliver quality and flexibility to our clients, such that we're sure that we're building the best products for their market. Its offer to customers is full-stack software development, software design services and consulting services. Its main clients are small and medium size companies (SME), and we help them innovate, improve their existing products and to analyze their market potential – that will eventually lead to the market success of their products. PowMio GmbH professionally address technical project challenges of our clients at any stage, either an early stage e.g. idea in a business plan, or e.g. extensions of a fully running commercial product. Furthermore, PowMio GmbH builds innovative solutions on its own and our daily work includes delivering innovative products to the market, and therefore very passionate about the success of their clients and open for investment negotiations to support innovative teams with the available skill set. Technologies and solutions we professionally apply daily: -

Languages: Java, C#, Java Script, SQL, HTML - Databases: PostgreSQL, MySQL, Microsoft SQL Server - Back-end: Apache Tomcat, NodeJS, Hibernate/JPA, PHP, Java EE - Front-end: Responsive web applications, native Android and iOS, Hybrid Apps, AngularJS, Apache Cordova, PhoneGap - Communication layer: RESTfull Services, JSON, XML - Other: Unity3D.

PowMio GmbH understanding of the market needs will significantly contribute to the project. Beside that our team consist of highly educated individuals that are professionals today and therefore aware of university work integrations. Our work in Germany also includes student supervision on daily basis and we're aware of problems that they are facing when entering the market. Not to mention our experiences in university collaboration and very strong background in international conference participations and presentations, and participation in projects where consortium partners come from many different European countries. This is our daily work, and one of the biggest problems is the human resources and their market unawareness as well as their limited technical and operational knowledge. Within this project PowMio GmbH will take active role in all work packages. It will host a study visit during WP1. In addition, its experience in the field will be valuable in planning of survey on companies' needs in task 1.3 Survey of companies needs for DHE in Serbia.

7. BELGRADE METROPOLITAN UNIVERSITY, SERBIA (BMU)

BMU is an integrated university consisting of three faculties, which are not legal entities: Faculty of Information Technology, Faculty of Digital Arts and Faculty of Management. BMU operates in two campuses - in Belgrade and Niš. BMU offers BSc programs in information technology, software engineering, information systems, game development, operations management, business and marketing, graphic design, design of interactive media and fashion design. MSc programs are in information security, software engineering, information systems, marketing management, and design of new media. PhD programs are in the areas of software engineering, management and development, and design of new media. Almost all study programs are offered in two forms: "face-to-face" and "online" (using e-learning). Most of it BSc programs are offered in three forms: "face-to-face", "online" (using e-learning) and "hybrid" (using blended-learning and flipped-classroom approach). Most of BMU master programs are

offered only as online programs. BMU is a modern university, known for its mission to provide quality education by implementing innovative approaches in higher education. For BMU, quality education has to provide graduates that satisfy needs and expectations of their employers. In its Business and Education Centre in Niš, BMU is promoting entrepreneurship of its students supported by the IT incubator and innovation development with IT companies in its Innovation Centre. By implementing Dual Higher Education, BMU expects to establish close and long-term collaboration with companies - future employers of its students. In its Innovation Centre, BMU offers space to software development units of companies providing continuous internships and scholarships to its students. BMU is very interested for implementation of Dual Higher Education (DHE) in its IT-related programs after the end of this project and was the initiator of this project proposal.

BMU will be involved in all WPs, but will be the most active in development WPs. BMU will be the leader in the WP2 (New Dual Higher Education model for Serbia) aiming to develop a flexible and generic DHE model, providing different specific DHE models for specific needs and requirement of companies practicing DHE. In WP3 (Creation of legal and other Conditions for implementation of DHE in Serbia), BMU will contribute in preparation of amendments to the Law on Dual Education, currently supporting Dual Education in secondary education only, to the Law on Higher Education, Labor Law and accreditation criteria and guidelines related to DHE. In WP4 (Pilot testing of the flexible and generic DHE model) BMU will organize a pilot implementation of DHE in the second half of the project with IT companies - associate members of this project, interested for DHE implementation. Just before the end of the project, BMU will analyze the achieved effects of implemented DHE model interviewing companies employing both graduate students that completed DHE studies (pilot DHE implementation) and traditional studies.

Belgrade Metropolitan University (BMU) aims to become an innovative and entrepreneurial University. Its role is not only to provide education and research missions, but also the third mission: the support of entrepreneurship of its students by developing new ideas into innovative products, especially in the area of IT. BMU is realizing this mission with close cooperation with

IT companies, especially in software development. Few business models have been developed so far to support different needs of BMU partner companies.

BMU is an integrated university consisting of three faculties, which are no legal entities. Every year BMU enrolls 350-400 new students in the area of computing, business management and digital arts. BMU offers BSc programs in information technology, software engineering, information systems, game development, operations management, business and marketing, graphic design, design of interactive media and fashion design. MSc programs are in information security, software engineering, information systems, marketing management, management in creative industries and design of new media. PhD programs are available in the area of computer science and bioinformatics, software engineering, management and development, and the design of new media. BMU operates in two campuses, in Belgrade and Niš.

Almost all study programs are offered in two forms: “face-to-face” and “online” (using e-learning). The online option is very convenient for employed students and students not living in Belgrade or Niš. This is the reason why 40-50% of BMU students are online students. BMU has experience dealing with employed online students who face many problems due to the fact that the Law of Higher Education does not recognize part-time studies. BMU plans to offer specific short cycle study programs in IT and programming, aiming at adults who wish to change their profession.

8. UNIVERSITY OF NOVI SAD, SERBIA (UNS)

The University of Novi Sad (UNS) was founded in 1960, operating in the four major towns of the Autonomous Province of Vojvodina: Novi Sad, Subotica, Zrenjanin, and Sombor. The University is comprised of the following 14 faculties covering all major fields of study: Faculty of Philosophy, Faculty of Agriculture, Faculty of Law, Faculty of Technology, Faculty of Economics, Faculty of Technical Sciences, Faculty of Medicine, Faculty of Sciences, Academy of Arts, Faculty of Civil Engineering, 'Mihajlo Pupin' Technical Faculty, Faculty of Sport and Physical Education, Faculty of Education, and the Teachers' Training Faculty in Hungarian. In December

2007, UNS founded the Institute of Lowland Forestry and Environment, the Institute of Food Technology, The Association of Centers for Interdisciplinary and Multidisciplinary Studies and Research, The UNESCO Chair in Entrepreneurial Studies, and Centers for Applied Statistics and Education Development.

Currently more than 43.000 students are enrolled at UNS at Bachelor level of studies, and there are around 6.500 students at Master and doctoral levels, studying in more than 350 study programs. The number of employees is more than 5.000, including teaching staff of around 3.770, and around 130 international teachers. Research at the University is achieved through basic, applied and development research in the field of law, economics, mathematical, technological, social and medical sciences. UNS has significant international cooperation with other HEIs and its experienced and well qualified staff plays a significant role in a great number of projects across Europe. The University of Novi Sad is the second largest among six state universities in Serbia. Having invested considerable efforts in intensifying international cooperation and participating in the process of university reforms in Europe, the University of Novi Sad has come to be recognized as a reform-oriented university.

UNS will be the leader of WP6: Dissemination and Exploitation of Results. It will be in charge of development and maintenance of project web portal, social media (Facebook, LinkedIn, YouTube) profiles and organization of dissemination events. UNS will have an active role in creation of pool of industrial partners from Autonomous Province of Vojvodina. In addition it will participate in all work packages of the project with an emphasis on the activities within preparation (WP1- Research and needs analysis) and development (WP2-Flexible and generic Dual Higher Education Model (DHEM) for Serbia, WP3- Creation of Legal and Other Conditions for Implementation of DHE, WP4-Pilot testing of the flexible and generic DHEM) work packages.

9. UNIVERSITY OF KRAGUJEVAC, SERBIA (UNIKG)

University of Kragujevac (UNIKG) is a modern educational and research centre embracing all major areas of teaching and research, presently comprising 12 faculties with 20 000 students and more than 1 000 academic staff. E-learning and Lifelong Learning activities at the UNIKG are expanding rapidly through various national and international projects. The University Centre for LLL is established in the framework of the Tempus project "Development of Lifelong Learning Framework in Serbia", and has the mission to promote research in educational and social policy and particularly in the fields of continuing education, the education of adults and of individuals with special needs. UNIKG has participated in several international projects such as FP7, EUREKA, COST, TEMPUS, EURECNA, SEE ERA NET PLUS and WUS. The Faculty of

Technical Sciences in Čačak (FTS ČA), as one of unit of University of Kragujevac, educates professionals in the field of technical and pedagogical sciences. The Faculty is equipped with several laboratories, including the Laboratory for Computer Science, The Laboratory for Information Technology, The Laboratory for Mechatronics, The Laboratory for Energy Efficiency and The Laboratory for Nanotechnology. FTS ČA has a newly equipped laboratory for video-conferencing thus enabling students and professors to benefit from distant training by professionals and experts worldwide.

UNIKG will be a leader of WP3: Creation of Legal and Other Conditions for Implementation of DHE in Serbia. Due to its expertise in the field, UNIKG staff will give special contribution to the development of amendments to considered laws and accreditation standards. Besides, as a partner institution, UNIKG is expected to be actively involved in all WPs of the project, including the following activities: - Research and needs analysis (current practice of Dual Education in the EU and worldwide, and companies needs for Dual Education in Serbia); - Development and validation of flexible and generic Dual Higher Education Model (DHEM) for Serbia; - Development of plans for pilot testing of specific DHEM; - Discussion Forum on the proposed DHEM model - Pilot testing of the specific DHEM model; - Creation of pools of industry partners interested to participate in the pilots; - Development of amendments to the Law on Higher Education, Law on Dual Education and amendments to the Accreditation Standards; - Development of the Recommendations to HEIs in Serbia on how to implement DHE; - Participation in project quality assurance, management and dissemination of the project's results.

<http://www.kg.ac.rs/>

10. UNIVERSITY OF NOVI PAZAR (SUNP)

SUNP is the only integrated state university in Serbia. With more than 4000 students and 250 permanent teaching staff (170 professors and lecturers and 80 assistants and research fellows) it is contributing to comprehensive development of the region. Integrated structure of SUNP has enabled it, as the youngest state university in Serbia, to develop much faster with the available funds and teaching and administration staff. SUNP operates through ten departments. It is accredited for 45 study programs (20 bachelor, 20 master and 5 PhD study programs). Relevant departments for the proposed project are Department for interdisciplinary studies and Departments of Technical Sciences with Civil Engineering and Architecture study programs. SUNP has noticed results and number of realized projects (national and international) in various

areas relevant to subject of this project like curriculum development, lifelong learning, university/enterprises cooperation, etc.

As a partner organization SUNP will be actively involved in all work packages of the project. In WP1 (Research and needs analysis) it will have special role in generation of pool of industry partners from Raska region. Within WP3 (Creation of Legal and Other Conditions for Implementation of DHE in Serbia), its expertise will be valuable in creation of the amendments to the Labor Law. In the second half of the project, during WP4 (Pilot testing of the flexible and generic DHEM) SUNP will organize pilot testing of specific DHEM. In addition, it will actively participate in quality assurance and monitoring, dissemination and exploitation and management activities.

11. SCHOOL OF ELECTRICAL AND COMPUTER ENGINEERING OF APPLIED STUDIES (VISER)

The School of Electrical Engineering and Computer Science of Applied Studies (VISER) is public high educational institution, financing from the budget of the Republic of Serbia and the income from tuition fees. The main activity is 3 year of vocational studies with 180 ECTS (7 different programs) and 1 year of specialized professional with 60 ECTS (5 different programs). Curricula for seven foundation study programs are developed, authorized and accredited, in three year duration and granting upon their completion 180 ECTS points: Audio and video technologies, Automation and Vehicle Control Systems, Electronics and Telecommunications, E- Business, New Energy Technologies, New Computer Technologies, Computer Engineering. Students may continue further education at 6 accredited specialist study programs in one year duration and granting upon their completion 60 ECTS points: Multimedia and digital television, Mechatronics, Electronics and Telecommunications, Information Technology, Electric Power Engineering, Security of Information and Communication systems. Graduate students receive bachelor and specialized diplomas. The school has a building with 4000 square meters, 24 different laboratories with top-edge equipment, specializes laboratories, Regional HDTV studio and class rooms with more than 1120 seats. The School of Electrical Engineering and Computer Science of Applied Studies was coordinating institution for one regional Tempus project no.517022 which is successfully finished and currently is partner on three on-going projects. VISER, known as a leader of Higher Education Institutions in the field of Applied Engineering Studies in the region, will help in successful implementation of the project objectives by strong efforts of competitive staff engaged in the project and school capacities. As a school in of Applied Studies, VISER will be the leader of WP4 (Pilot testing of the flexible and generic DHEM). In addition, it will be involved in all project work packages. VISER is going to participate in project preparation activities, developing new curriculums for dual education, pilot testing, dissemination and managing activities. VISER will actively participate in teachers training, curricula development, development of working books and all guidelines, cooperation

with enterprises, training of mentors from industry, monitoring of students during dual education process, results analysis, publishing of papers with results, organization of dissemination events.

It is a public HE institution, financed from the budget of the Republic of Serbia, but it has income from tuition fees as well. The main activity is 3 year of vocational studies with 180 ECTS (7 different programs) and 1 year of specialized professional training with 60 ECTS (5 different programs). Curricula for seven foundation study programs are developed, authorized and accredited, in three- year duration and granting upon their completion 180 ECTS points: Audio and video technologies, Automation and Vehicle Control Systems, Electronics and Telecommunications, E-Business, New Energy Technologies, New Computer Technologies, Computer Engineering. Students may continue further education at 6 accredited specialist study programs with the duration of one year. They are granted 60 ECTS for it. Multimedia and digital television, Mechatronics, Electronics and Telecommunications, Information Technology, Electric Power Engineering, Security of Information and Communication systems. Graduate students receive Bachelor and specialized diplomas. The school has a spacious building of 4000 square meters, 24 different laboratories with state-of-the-art equipment, specialized laboratories, Regional HDTV studio and classrooms with more than 1120 seats. VISER was the coordinating institution for one regional Tempus project (no.517022) which was successfully completed.

12. THE MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGICAL DEVELOPMENT OF THE REPUBLIC OF SERBIA (MPNTR)

The Ministry of Education, Science and Technological Development of the Republic of Serbia is in charge of administration tasks related to: research, planning and development of education; administrative supervision in education and student standards; participation in the construction, equipping and maintenance of facilities for education; pedagogic supervision in education and student standards; organization, performance, appraisal and supervision of the training of employees in education; validation of public documents acquired abroad; improvement of social care for gifted students; improvement of social care for students with special needs, creating conditions for access and implementation of projects within the scope of the Ministry which are funded by the EU IPA funds, grants and other forms of development assistance, as well as other duties prescribed by law. The Ministry of Education, Science and Technological Development carries out public administration tasks related to the system, development and promotion of scientific research in the scientific, technological and economic development; proposing and implementing policies and strategies of scientific and technological development; identification and implementation of programs of scientific and technological research and development; training of personnel for scientific research; proposing and implementing innovation policy; knowledge and technology transfer in the economy; development and improvement of the innovation system in the Republic of Serbia; regulations in the field of

transport and intellectual property rights; development of the functioning of scientific and technological information and program development of scientific and technological infrastructure.

Within this project MPNTR will be involved in all work packages. It will - Provide support to some of the preparatory activities, such as the survey of companies needs for DualHigher Education (WP1), -Give opinions and recommendations of the Ministry on some of the important project outcomes (as working drafts), such as: a. The flexible and generic Dual Higher Education Model (DHEM) for Serbia (WP2) b. Pilot implementation and testing of specific DHEMs (WP4) c. Amendments to the Law on Dual Education of Serbia (WP3) d. Amendments to the Low on Higher Education of Serbia (WP3) e. Amendments to the Accreditation Standards (WP3) - Support the implementation of these amendments. - Support project public events and project dissemination activities by: a. Accepting to be co-organizer of the Discussion Forum on the proposed DHEM (WP2) b. Accepting to be co-organizer of seminars “How companies may benefit from Dual Higher Education?” (WP6) c. Accepting to be co-organizer of the final dissemination conference (WP6).

13. THE NATIONAL COUNCIL OF HIGHER EDUCATION OF THE REPUBLIC OF SERBIA (NCHE)

The National Council of Higher Education (NCHE) has a leading role in the higher education in Serbia as a professional organization representing the academic community. NHCE is the highest-rank institution in the Republic of Serbia which, according to the Law on Higher Education, is responsible for ensuring the development and improvement of the quality of higher education. NHCE determines scientific, artistic and vocational areas within fields referred to in Article 27 of the Law on Higher Education, based on the proposal of the Conference of the Universities of Serbia and the Conference of High School Principals. Functions of the NCHE are prescribed by Art. 11 of the Law on Higher Education. It observes the development of the higher education system in Serbia and its conformity with the European standards; formulates proposals for the Ministry of Education on the higher education policy; prescribes standards for accreditation of higher education institutions and study programs; decides in the appellate procedure on the decisions on accreditation issued by the Commission for Accreditation and Quality Assurance; prescribes minimal criteria for the election of higher education professors; proposes the National Qualification Framework; prescribes the list of professional, academic and scientific titles; proposes to the Government material resources for funding public higher education institutions and their study programs, as well as criteria for the distribution of resources, etc. NCHE encompasses 21 members from academia elected by the Parliament out of which 12 have been proposed by the Conference of the Universities of Serbia, 2 by the

Conference of the Academies of Professional Studies, 6 by the Government of Serbia and 1 by the Provincial Government of Vojvodina. Two representatives of students take part in the sessions of the NCHE. The members of the NCHE elect among themselves the President, two Vice Presidents and one Secretary General.

The National Council for Higher Education (NCHE) as the very important organization in Serbian higher educational system will have an important role to participate in all activities as well as to monitor all activities and to direct consortium. Since NCHE consists of representatives of Conference of the Universities of Serbia, Conference of the Academies of Professional Studies, Government of Serbia and the Provincial Government of Vojvodina, it will have all important representatives included. NCHE will provide channels for communication to whole academic community from and to project consortium. On the other hand, NCHE will provide support and the leading role in the development and adoption of necessary accreditation standards.

Members of the NCHE are elected by KONUS, the roof organization of all Serbian Universities. NCHE is in charge of proposing criteria for accreditation of HE institutions and long distance learning. In general, NCHE is responsible for all activities in HE in Serbia in close cooperation with Ministry of Education, science and technology development of Serbia.

14. NIS CLUSTER OF ADVANCED TECHNOLOGIES, SERBIA (NI-CAT)

NI-CAT cluster is non-profit association of successful companies, scientific research institutions (Faculties of Electronic Engineering and Mechanical Engineering) and economic development support institutions, founded in 2011. We are leading institutions working with Hi tech industry in South East Serbia and we have catalyst role in community and the region. NI-CAT is self-sustainable from the beginning and main goals of organization are: increasing of the turnover of the cluster members both on national and international market, strengthening of the capacities of the companies for technological development and innovations and the development of new technological products and services, promotion of the City of Nis as a favorable location for business operations in the advanced technology field. The ultimate objective of the NI-CAT cluster is to empower and modernize electronic, electro-mechanical and ICT industries in Serbia, and facilitate financing of new development projects, and therefore expand the business scope of the Association's members and source new markets for their promotion. Fields of Operation: Electro medicine, Electronics and Automation, Information and Communication Technologies, Mechanical Engineering, Optoelectronics. NI-CAT main projects are: IPA CBC BG-SRB program - ATM Integration project (2012); NARD (National Agency for Regional

Development) program - NI-CAT cluster InterSTART project (2012/2013), Inter-sector project - Best national cluster project in Serbia (2013/2014), SLDP USAID program - ICT Cluster Academy project (2014). NARD program- NiCAT Dermoskope project - Best national cluster project in Serbia (2014/2015), E-learning platform for employees learning and development (2015/2016)... NI-CAT cluster have great cooperation with many stakeholders at the local level and strategic partnership with other three ICT clusters in Serbia and NI-CAT is one of seven Founders and Board members of Serbian Cluster Association, as well as members of the Council of clusters of Serbia. Also, NI-CAT is the member of Digital SME Alliance and have signed MoU with 14 other clusters from the Balkans and Black Sea region.

NI-CAT will take active participation in all project work packages. As a cluster that includes successful companies, it is expected that NI-CAT will give an important contribution to preparation and development activities, and especially in: - Survey of companies needs for DHE in Serbia (WP1) - Generation of pool of industry partners from South East Serbia (WP1 and WP4) - Co-organize the Conference on DualEdu added value to industrial sector (WP2) - Creation of Amendments to the Labor Law (WP3) - Pilot testing of the flexible and generic DHEM (WP4).

4. Dissemination channels: online and off-line

There will be different dissemination products in this project, which are targeted at different groups of people, considering their specific needs and requirements.

4.1. Public awareness activities/external activities

Public awareness activities are oriented on spreading the information about the project to the broad community. They are also to prepare the exploitation of results or possible technology transfer. Some of these activities are a base for external communication with other experts, or, with representatives of other research projects.

1. Major public awareness/communication activities planned:

- Project visual identity
- Public website
- General informative articles in webs, press releases.
- General informative presentations on the occasion of other projects' workshops or info days
- TV broadcast to the general public
- Issuing informative material for external communication (leaflet, poster, postcard etc.)
- Study trips

In order to disseminate results outside partner countries, study trips are organized, during which there is a possibility to meet a variety of external stakeholders representing different sectors and

institutions. The e-learning programs created within the project will be sent to all identified organizations related, announcements will be included in newsletters and uploaded to websites.

Project logo:

Within the first two months, the project logo will be developed. The partners will agree on the general shape and visual identity of the logo. Several versions of the logo will be designed and, the partners vote for the most aesthetic and best possible design. The logo is to refer to the main idea of the project, it should be visually (shape, color) attractive and easy to recall. This is why the main aim of the project logo is to raise the awareness of the DUALEDU project by attracting the attention of potential target groups. Also, it serves the purpose of project identification printed on all project-related documents. Project logo is also going to be used in predefined power point templates that will be used in presentations by all project partners in any occasion.

Website

The web site will be developed at the beginning of the project with the goal to provide effective dissemination of project results and inform stakeholders on a timely basis about all relevant activities during the project realization. To achieve accessibility to a large number of potential users, the web site will be multiplatform operable (Windows, Linux, Windows Phone, Android, iOS) and will contain responsive design for different devices (PC, mobile, tablet) with characteristics of efficiency and ease of use. It will contain information in English, such as: general information about the project, work packages of the project, as well as basic information about project participants. In addition, the web site will be presenting all events, activities and news of the project implementation over a period of three years. In its structure it will contain sections which show events photos, related web sites links and contact page. In the separate section of the web site, there will be a download section which will contain all the artifacts (mainly documents) created during the project organized in the categories, which will be able to be viewed and downloaded from the website during and after the DualEdu project realization. In order to achieve as much dissemination effect as possible, the website will have the possibility of integrating its content with social networks Facebook, LinkedIn, Twitter, etc.

The website will have its download zone, where all documents from meetings, reports and deliverables will be uploaded. Later on, every visitor to a website will be able to download the material. It also makes the internal dissemination of information smooth and efficient. It makes the project documents available, keeps record of project events, meetings, correspondence. Photos and presentations will be also uploaded.

Beside the official project web site, project partners should (when it is possible and justified) use their official web sites to promote project, inform public about activities and announce future activities

Press releases/Informative articles:

Press release is a written or recorded short communication spread via a particular media channel in order to announce something claimed as having news value. Depending on the media channel the release might be concentrated on spreading news related to the particular topic (news release, which is compilation of facts, then developed by journalists to complete the short "story"), or it might be concentrated on expressing opinion (for example to highlight an important event).

Depending on topics and the project's progress both types of press releases might be used. In order to provide press release, relevant media channels will be identified and then selected according to their best suitability to the project's needs. The major newspapers, such as "Blic", "Danas", "Dnevnik", "Subotičke novine" will be involved in this phase.

Informative presentations

Since project participants represent mainly the educational sector, some are coming from the business sector, as well as from a variety of decision-making bodies, there will be many events during which partners have an opportunity to present information related to DUALEDU. The main goal of participation in various events (educational, business or other) is to raise awareness of the project among different target groups as much as possible. Within such events the project will be promoted and current progress will be reported. The presentations will consider the area of interest of event participants. Each partner which participates in events at national or regional level will make short information about the event including the photos and presentation itself (if there was any) and make this info available on the website of the project.

TV broadcasts:

TV broadcasts represent the most efficient dissemination channel. Local and regional (national if possible) televisions and networks will be used in the project's dissemination work to reach the widest possible public. Information for TV dissemination will communicate project aims, activities and results and short reports from study visits that are planned within the DUALEDU project. Project partners will use this channel to communicate their activities within the project to wider public and to promote their role and overall aim and importance of DUALEDU objectives. TV as dissemination channel is very important, but pretty hard to plan in advance for project partners since decision making on the content, timing and importance of a information for TV broadcast are not in hands of project participants. Project participants will try as much as possible to communicate the widest possible public via this channel.

As one of the first dissemination activities, an interview on Radio Television of Serbia will be held in February 2018. This will be opportunity to promote project to a wider public through interviews of representatives of project consortium.

Leaflets, posters:

A Project flyer will be created in electronic form to communicate information about project identity, aims and objectives. It will be addressed to the general public, companies and to universities. The flyers will be adjusted to the current project's stage and will promote the project's current achievements, possibly adjusted also to the target audience in case of preparing it for a planned event.

Project posters will be created to be used as marketing instruments at events and partner institutions. The project poster will consist of the project's logo and title, logo of Erasmus+, and it will be consistent with the project's visual identity.

All partners have the possibility to give a proposal for leaflets, but University of Novi Sad will print only the selected one respecting the budget of 2200 euro.

4.2 Academic/technical publications and presentations

Academic and/or technical publication/presentation activities are also part of the project. Presentations are planned at seminars, workshops, conferences on project findings especially on analysis of EU practice, experiences and legislation in the area of dual higher education (DHE) and survey of Serbian companies (from different regions and in different industrial sectors) needs for DHE. Research journals may accommodate participants' presentations and academic writings. In DUALEDU a relatively high number of participants from the research sector give substantial potential for this kind of publication activities. On the other hand, the relatively high number of decision making bodies in the project (2 national institutions in HE system in Serbia (MESTD- Ministry of Education, Science and Technological Development of the Republic of Serbia, and NCHE - National Council of Higher Education of Republic of Serbia) and CCS - Chamber of Commerce of Serbia) means that the project findings and outcomes appear in official documents and project-related issues and findings will be raised on the occasion of official meetings as well. DUALEDU project intends to analyze EU experiences and to create a background for legislative changes in education, training and employment system.

Mentioned publications will be: amendments to the Law on Higher Education of Serbia and Law on Dual Education; amendments to the Labor Law; amendments to the Accreditation Standards (M8); recommendations to HEIs in Serbia how to implement DHE.

Internal dissemination activities. They include:

- Mailing lists
- Working groups
- Electronic platform
- Emails
- Working group meetings
- Publications (mostly electronic) for internal use
- project meetings

Mailing lists

The narrower and wider, internal and external mailing lists are dissemination tools of great significance. They serve the purpose of fast and efficient internal communication, but they are also tools, which can be used to reach the wider public as well.

UNS will prepare mailing list and it will be uploaded at the website of the project.

Working groups:

In the initial phase of the project each partner institution will create a working group for DUALEDU. Project tasks are evenly distributed among the individual working groups. Members are selected on the basis of their expertise, professional, as well as their previous project experience. Their dissemination 'power' and expertise is also a point in their selection.

From the members of working groups, every partner will delegate one person for dissemination activities. They will inform UNS about the name and contact of that person and all communication regarding dissemination activities will through them.

Emails

Emails are the most frequent form of sharing ideas, asking and answering questions, and requesting, or giving clarification.

Working group meetings

Meetings are organized throughout the project. Minutes of these meetings can be circulated among the members of a wider group as well. Local working group meetings may regularly invite stakeholders from other units of the university/organization (including students, representatives of student unions or other student organizations) and also from the local or regional communities to raise awareness of and give information on DUALEDU goals and achievements.

During the kick-off meeting of the project, minutes of consortium meeting will be also designed, in order to be compatible with overall visual identity of the project.

Publications for internal use

The publications for internal use are mostly electronic. Ppt. presentations prepared for local or project group meetings are also part of internal publications.

5. Dissemination activities and dissemination strategy

Table 1. Dissemination activities and strategy

Phase characteristics and timing	Phase purposes	Possible tools
Phase 1 – Awareness building (months 1 – 12)		
No particular outputs yet, only plans, goals and methodologies to be defined	• Raising general awareness of the DUALEDU project; • Announcing the project's goals and plans • Raising attention among relevant target groups • Spreading information among potential participants • Project kick-off dissemination knowledge in the mass and social media.	• DUALEDU logo • Presentation, report template • Initial flyer • Web sites • Setting up working groups • Kick-off project meeting • Online meetings • working group meetings • ppts, reports • study trips
Phase 2 – Legislation framework, elaboration of programs, piloting (months 13-36)		
• Legislation framework, needed for establishment of DUALEDU model in Serbia • 2. Draft version of amendments for discussion among stakeholders	• Raising awareness about the possibilities and good practice usage of the web based tools among target groups • Announcing the Dual Higher Education Model for Serbia and draft models of	• Conferences • Discussion panels • Presentations • articles • External and internal workshops/seminars, info days

DUALEDU and to • Explore the most appropriate solutions for DUALEDU. • Dissemination shall concentrate on creating awareness of collected good practices	amendments to relevant target groups • Developing Internet presence • Publishing news	
Phase 3 – End of Project		
• All products, resources and tools are ready	• Announcing the final results of the project • Presenting cases and best practices in EU DualEdu models • Presenting the amendments to the Law on Higher Education of Serbia and Law on Dual Education; to the Labor Law; to the Accreditation Standards ; recommendations to HEIs in Serbia how to implement DHE • Elaborating and spreading future exploitation plans.	• Electronic index of all stakeholders • Final newsletter summarizing the results • Press releases • Final conference • Conference proceedings • Complete program/course documentations

6. Target groups and different stakeholders

Within DUALEDU the following stakeholders at different levels of impact are identified:

1. Local:

- a. Students: Seeking for qualifications according to needs of local companies.
- b. HEIs: To train and educate professional staff at Level 5 needed by local companies
- c. Employers: Local companies looking for cost-effective professionals

2. National:

- a. Employed students: They want to get new qualifications in their profession or go into new areas.
- b. Jobless students: Seeking to get fast new qualifications according to demands on the labour market.
- c. HEIs: HE professional studies and universities are interested to offer DUALEDU kind of study programs for
- d. Employers: Looking for cost-effective professional laborers, with specified skill sets.
- e. MESTD- Ministry of Education, Science and Technological Development of the Republic of Serbia,
- f. NCHE - National Council of Higher Education of Republic of Serbia) and
- g. CCS - Chamber of Commerce of Serbia

3. Regional:

- a. Students: As there are no language barriers, students from Bosnia and Herzegovina, Montenegro and Croatia may find DUALEDU programs that they cannot find locally.
- b. HEIs: They are trying to increase the number of students offering similar study programs.

4. European:

- a. Students: Those who want to find jobs in EU countries and are looking for HE programs harmonized with the European Qualification Framework at Level 5,6,7 (EQF)

- b. HEIs: Serbian HEIs seeking to adopt their studies according to EU labor market needs.
- c. Employers: Companies in EU countries offering jobs at EQF Level 5,6,7 to foreigners as they cannot find appropriate workforce in their country.

Dissemination strategies for the individual target groups:

1. **POTENTIAL STUDENTS:** A special web site will be created only for DUALEDU studies. All HEIs will be asked to announce their offer of DUALEDU studies. This site will be promoted at the end of the project and later maintained by UNS. The site will be advertised from time to time in order to inform potential students about DUALEDU studies. A special brochure will be published and will be delivered during and after the project. Potential students will be also informed through web sites of HEIs offering these studies, invited to meetings, info days.

2. **HEIs:** All HEIs in Serbia will be informed about the project outcomes. They will get the proceedings of the Final Conference, with all PT & SCHE specification documents, a report on the pilot implementations and the implementation guidelines. They will also be informed through KONUS, as rectors of all universities are part of it, and KONUS is one of the project partners.

3. **ACCREDITATION COMMISSION:** The consortium will inform the Accreditation commission about the accreditation criteria for DUALEDU studies, as one of the outcomes of the project (after discussion and finalization of amenders). The Accreditation Commission will be invited to participate in the Final Conference and will get its proceedings. The Accreditation Commission is, by Law, authorized to issue the accreditation of studies.

4. **NATIONAL COUNCIL OF HIGHER EDUCATION (NCHE):** As the project partner and authorized by Law, NCHE will set the accreditation criteria for DUALEDU studies.

5. **MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGICAL DEVELOPMENT (MEST):** As one of project partners, MEST will prepare the draft legislation documents to be adopted by the Government of Serbia and the Parliament (Legislation of HE). MEST will publicize all relevant information on DUALEDU studies on its web site.

6. EMPLOYERS: CCS - Chamber of Commerce of Serbia, as one of the project partners, will inform its members and other companies about new legislation on DUALEDU studies and the programs offered.

7. NATIONAL EMPLOYMENT AGENCY: It will be invited to the Final Conference in order to be informed about the benefits that DUALEDU studies may have on employment. It will be invited to all roundtable discussions and conferences during the project. It is in the best interest of this organization to disseminate information on DUALEDU to all potential employees.

8. GENERAL PUBLIC: All HEIs offering DUALEDU studies will promote them and provide appropriate marketing campaigns as this is in their interest. The general public will be informed about these new studies through advertising campaigns, events (job fairs, career counseling events). We expect that mass media will also participate.

7. Dissemination methodology

For effective planning activities a good initial Dissemination and Exploitation Plan and regular updating are required; in addition, the engagement of all partners to disseminate the knowledge in all participating countries is also important. Especially those countries need to be active in dissemination activities, where the DUALEDU programs will be piloted through universities and employers. The way of planning activities will be as follows:

- Partners propose activities they would like to undertake and give all necessary details;
- UNS as dissemination leader gathers and merges the input;
- UNS presents all propositions during project meetings;
- The project consortium jointly decides what activities will be undertaken and by whom – this way responsibility is allocated to particular project partners.

In some urgent cases, when it is impossible to postpone making the decision, the consortium will be informed via emails and/or other collaboration platform on the website of the coordinator and the WP leader (UNS), and the decision will be made also through the same communication channels.

Performing previously planned dissemination activities consists of three main steps:

Organization of the activity and preparation of all relevant staff (e.g. printing flyers, preparing presentations, etc.);

Performing the event (e.g. giving the presentation, chairing the workshop, sending newsletter, publishing press release, etc.);

Gathering all relevant pieces of information, data and feedback to report the activity.

The responsible partner shall undertake the aforementioned steps and keep the DUALEDU coordinator informed on the progress of the performed activities.

Since the dissemination process as a whole was divided into three main phases, all undertaken activities must be adjusted to the dissemination phase according to the current state of the project.

Partners responsible for performing dissemination activities will report them after they are finished to the project coordinator and the leader of WP 6, the Dissemination package. The activities will be reported in a specific template in order to be described in a similar way and take into consideration all its relevant aspects. In all cases, the activity material used has to be attached, including presentation slides, articles, press releases, leaflets etc.

8. Definition of responsibilities

The power of the communication and dissemination activities of DUALEDU lies in the ambition of project partners and the well-tailored design, which maximally took into consideration the characteristics and needs of each specific target group, including decision makers, university staff, employers and potential students. This is why the project applies multiple communication and dissemination tools, such as round table discussions, conferences, comprehensive and attractive printed materials, newsletters, Web portal, dissemination through media etc.

To communicate efficiently the objectives of the project and to provide feedback on the progress of the work being performed in the individual work packages, especially of the key actors, dissemination activities are shared.

Involvement of the actors and target groups are key factors for the success of the project. Stakeholders will have available innovative and updated instructive material online and in their schools. The project will have its web page, so that beneficiaries can always be informed about relevant activities and novelties. Project results will be made available on the project web site to the wider public as well. Representatives of the profession and members of the general public will have access to written recommendation policies, drafted legal documents, examples of best practice, recommendations. Through printed promotional material, TV appearances, conference publications, the project will contribute significantly to the promotion and popularization of DUALEDU studies in general. The stakeholders will have access to valuable resources of innovative practices.

Sustainability of project outcomes is granted by the fact that the DUALEDU Web portal will be maintained for at least three years after the end of the project. All project deliverables and results will be published on the Web portal. For continuous improvement of the Web portal the hit rate on the Web portal will be monitored to see how well it is used. One part of the Web portal will only be reached by the partners through a special login where all internal project information and documents are placed. The information on the Web portal will be available in English and in Serbian.

A comprehensive and attractive brochure in easy-to-bring-with-you format about the project and a logo for the project will be produced during the first quarter of the project. Information about the project's progress and outcomes will be disseminated through press releases sent out to the media. By collecting all press releases, articles, etc. the project management will be able to continuously analyze how well the project is being communicated.

The major and most crucial outcomes of the project will be communicated at press conferences and on the occasion of the final large-scale international conference of the project. The results and outcomes of the project will be presented to all stakeholders.

9. Available resources for dissemination

In this section we describe the available resources for dissemination and structure of resources among the partners.

Table 2 represents the structure of project costs by working packages. It indicates that costs of Dissemination and exploitation holds 6.5% of total costs, wherein more than 50% constitute staff cost.

Table 2. Structure of total project costs by working packages

WorkPackage	1. Staff Costs	2. Travel Costs	3. Costs of Stay	4. Equipment Costs	5. Subcontracting Costs	Total (EUR)	Structure
Preparation	68,960.00	31,565.00	58,080.00		5,500.00	164,105.00	16.5%
Development	196,191.00	6,880.00	10,080.00	297,693.00	18,200.00	529,044.00	53.3%
Quality Plan	37,981.00				3,700.00	41,681.00	4.2%
Dissemination & Exploitation	38,659.00	3,580.00	7,800.00		14,200.00	64,239.00	6.5%
Management	55,087.00	38,900.00	77,730.00		21,524.00	193,241.00	19.5%
Total	396,878.00	80,925.00	153,690.00	297,693.00	63,124.00	992,310.00	100.0%

Table 3 shows the distribution of costs among the partners for the Dissemination and exploitation. University of Novi Sad capture major share of the costs (UNS). With amount of 4200 euro UNS has to accomplish following tasks: web site of the project, leaflets and posters, logo and motto and other project material. With amount of 1800 euro UNS will cover the expenses of translation of interim dissemination and exploitation report, printing final dissemination and exploitation report, translation of final dissemination and exploitation.

Table 3. Structure of Dissemination & Exploitation Cost by partners

Partner	Dissemination & Exploitation Cost	Structure
P1 - UNIVERSITY OF BELGRADE (UB)	8,880.00	13.8%
P2 - FH JOANNEUM UNIVERSITY OF APPLIED SCIENCES (FHJ)	3,310.00	5.2%
P3 - FORMASUP (FORMASUP)	3,235.00	5.0%
P4 - UNIVERSITAT DE LLEIDA (UDL)	2,585.00	4.0%
P5 - University of Social Sciences in Lodz (SAN)	3,325.00	5.2%
P6 - PowMio GmbH (PowMio)	2,807.00	4.4%
P7 - Belgrade Metropolitan University (UB)	5,105.00	7.9%
P8 - University of Novi Sad (UNS)	16,325.00	25.4%
P9 - University of Kragujevac	5,337.00	8.3%
P10 - State University of Novi Pazar (SUNP)	6,501.00	10.1%
P11 - SCHOOL OF ELECTRICAL AND COMPUTER ENGINEERING OF APPLIED STUDIES (VISER)	3,432.00	5.3%
P12 - Ministry of Education, Science and Technological Development (MPNTR)	752.00	1.2%
P13 - NATIONAL COUNCIL FOR HIGHER EDUCATION (NCHE)	1,180.00	1.8%
P14 - NIS CLUSTER OF ADVANCED TECHNOLOGIES (NI-CAT)	1,465.00	2.3%
TOTAL	64,239.00	100.0%

Coordinator of the project University of Belgrade has in disposal 3400 euro for printing and publishing proceedings of the final conference and translation service, while all other partners from Serbia has 800 euro for advertising for new DualEdu offering.

10. Summary and conclusions

All project partners are going to be deeply involved in the dissemination process. They are all dedicated to the successful dissemination of DUALEDU project outcomes. Their previous project experience as well as the variety of areas and activities they represent and the fact that they all have expertise in dissemination activities, are also key factors leading to successful and efficient dissemination work in the project.

The main dissemination objective is to widely spread the project's assumptions and results and to reach the variety of target groups according to the project's scope. In order to realize these dissemination goals a variety of particular activities will be undertaken. Apart from project logo, presentation template, initial flyers and website the consortium is going to present the project using Internet, press, journals, articles etc., through participating in different types of events and continuously updating the prepared material. Several newsletters and press releases are going to be published, announcing the project's news. Special emphasis will be put on participating in events thematically related to the project's scope and creating awareness among participants of these events either through presenting the project, or through distributing dissemination material. All stakeholders will have the necessary information in order to side with and support DUALEDU objectives and outcomes. The wider public will also have access to project ideas and results through a variety of dissemination materials and actions.

All undertaken dissemination actions will further be summarized in the Dissemination Report and Interim Reports and discussed in working group events and Consortium meetings.