

Institutional framework for development of the third mission of universities in Serbia

Final report on implementation of third mission activities and their impact in Serbia







D2.6. Final report on implementation of third mission activities and their impact in Serbia

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Abstract	At the end of the project the Final Report on Implementation of Third Mission Activities will be published in order to present the most significant results of the implementation of third mission at seven Serbian HEIs. As the third mission activities will be improved and implemented during the whole project life span, the progress of these activities will be monitored and described in the
	Report





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### 1 <u>Technology transfer and innovation</u>

### 1.1 University of Kragujevac (UKG)

### 1.1.1 Institutional policy

The <u>Statute of the University of Kragujevac</u> was amended in April 2018. The amended Statute incorporates some provisions of the new Law on Higher Education related to the technology transfer and innovations. This particularly refers to the establishment of centers for technology transfer, innovation centers, business and technology parks, and other units with the aim of commercialization of research results generated at the University:

- Article 34 includes the provisions related to the establishment of research centers, centers of excellence, science and technology parks and other organizations that perform the innovation activities and provide the infrastructural support the development of innovations and commercialization of research results

### 1.1.2 Development of institutional legal acts

During the implementation of IF4TM project a set of institutional acts were developed and adopted.

<u>Bylaw on the management of intellectual property</u> applies to the intellectual property generated as the result of research, scientific and artistic work conducted at the University of Kragujevac and its faculty members using the University's resources. The bylaw was adopted in June 2017 by the University Council.

The Bylaw covers the management of the following forms of intellectual property:

- Patentable inventions
- Know how
- Industrial design
- Data bases
- Computer programs
- Plant varieties
- Indications of geographical origin
- Topography.

It provides the description of the procedure for the disclosure of inventions that goes through the University and its Technology Transfer Centre., the reviewing process of submitted disclosure applications, the tasks of Committee for intellectual property protection, and decision-making process.

**Forms for IP management** were developed in order to facilitate the process of disclosure of research findings. They include forms for

- <u>disclosing patentable results</u>
- industrial design, and
- indication of geographical origin.

<u>Bylaw on IP reviewing procedures</u> defines the terms for reviewing process, the procedure for appointment of reviewers, the steps for reviewing the disclosure applications at the University





of Kragujevac and its members. The Bylaw was adopted in November 2017 by the University Council.

The review process refers to professional activities including the scientific, technical and other skills exploited to provide the Committee for protection of intellectual property the professional opinion on the subject of disclosure applications that researchers submit to the University once the new research result is generated.

The Bylaw defines following aspects:

- Requirements for reviewers
- Procedure for application for a reviewer
- Procedure and reviewing steps
- Rights and obligations of reviewers

<u>Decision on Establishment of Technology Transfer center</u> was brought in June 2017 by the University Council. The Decision regulates the terms for operating the Center, its activities and management structure.

The core activity of the Center as defined in the Decision is Leasing of intellectual property and similar products, copyright and other related rights.

The organizational issues are also described in terms of company structure, the structure of Assembly and its activities, director and its activities, decision making process, etc.

### 1.1.3 Organizational units dealing with TTI activities

Technology Transfer Centre of the University of Kragujevac was established in June 2017 by the Council's <u>Decision on Establishment of Technology Transfer Center</u>. The Center was established as the limited liability company whose core activity is the leasing of intellectual property and similar products.

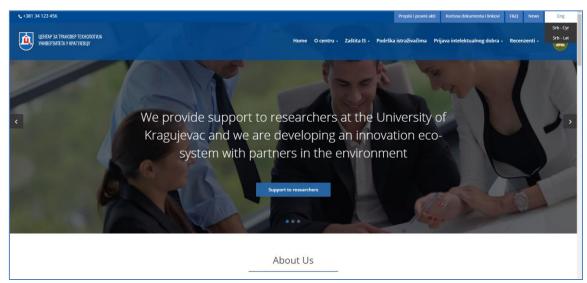
The TTC Center performs the activities of technology transfer with the aim of application of technological innovations, including searching for ideas and partners for technology transfer, evaluation of commercial potential of transfer, support to the realization and commercialization of technology transfer and assistance in protection of intellectual property. Besides the activities foreseen by the establishment act, the Center also

- Provides assistance to authors and researchers related to the assessment, evaluation, registration, industrial exploitation and protection of the intellectual property generated at the University of Kragujevac and its member faculties.
- Performs the detailed examination of the legal, economic and other aspects of intellectual property generated at the University
- Provides assistance in elaboration of the plans for all levels of industrial exploitation and financing, risk assessment, conflict of interest, etc.
- Provides necessary expertize to the authors and researchers in all phases of innovation cycle (market research, development of prototypes, networking, searching investors, contracting, licensing, etc.)
- Support the establishment of spin-off companies and their development
- Improves the opportunities for application of scientific and research results of the University and its member faculties with the purpose of development of economy and society at large





Accompanying the act on establishment of the TTC Center, the supporting <u>TTC website</u> was developed.

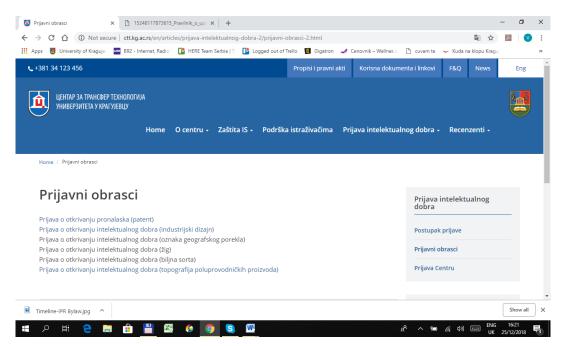


The website contain the main information on the Centers, its activities, mission and vision.

It further provides the information on relevant aspects of the protection of intellectual property (IP protection, Bylaw, application of Bylaw, IP rights and relevant laws).

The separate section is dedicated to the measures of support to researchers with the list of support measures they can use in commercialization and IP evaluation of their research and scientific results.

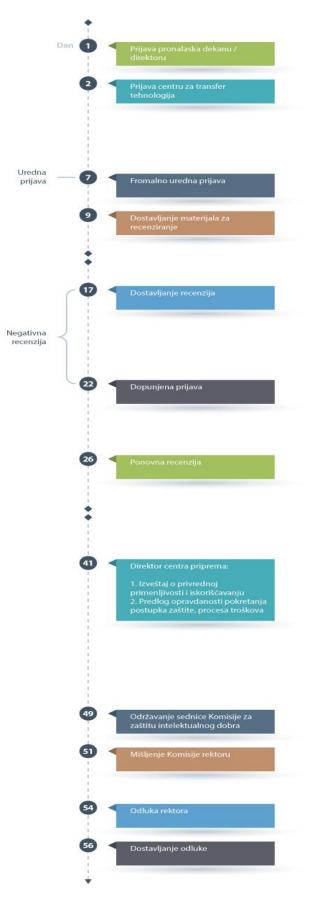
As far as disclosure application process is concerned, the TCC center provides the detailed description of the application process, with schematic preview and timeline, the application forms (for patentable results, industrial design ad topography of semi-conductor products) (see figures below). Other forms are in the process of development.



List of application forms for different IP disclosures at CTT UKG web site



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Timeline for disclosure application process at UKG





## 1.1.4 Building capacities and motivating university staff and students to engage in TTI activities

Within the mechanisms for building the capacity of university staff and students to be more actively engaged in technology transfer and innovations, the University of Kragujevac organized several events and provided the opportunity to its staff to attend events organized by other project partners.

<u>Capacity building programme "How to Create and Manage Start-ups"</u> was organized in November 2017 by Intellectual Property Office and Technology Transfer Center of University of Belgrade in close cooperation with World Intellectual Property Organization. This two-day event was designed for those dealing with technology transfer, innovations and IP at universities, technology transfer offices, support centers, etc. The focus was on building capacity of relevant staff in the process of technology transfer from universities to industry, particularly in the form of creating start-ups. The representatives of University of Kragujevac participated in this training.

University of Kragujevac in cooperation with Serbian Chambers of Commerce, "Climate-KIC" program and UNPD organized jointly the capacity building training "<u>Making and developing business ideas</u>" in June 2018. The training was designed for students of all levels with the aim to provide an added value through application of innovative methods and techniques, and facilitate the transition of their ideas into business ventures.

Capacity building training "<u>WIPO Tools for Intellectual Property for the universities</u>" was organized in November 2018. The topic of the training was related to intellectual property management tools at universities developed by WIPO in early 2018 and expected to be publicly announced at the beginning of 2019. The University staff attended this training.

Additionally, the workshops "<u>Methodology guide for innovation</u>" was organized by the University of Kragujevac for its staff and students in March 2017. The workshop covered topics such as crowd-funding model of financing innovations, IPR protection principles, establishment of the University Innovation Platform in Serbia. The participants also had an opportunity to hear about the experiences of their EU colleagues related to the innovation topics.

Apart from the capacity building, the University of Kragujevac took also some steps to promote the entrepreneurship and in this way motivate its students to engage in generation of ideas and innovations. The University organized two local <u>competition for best student</u> <u>ideas</u> where students of all study levels could present their ideas, go through the set of <u>targeted training sessions</u> and receive the support in realization of their ideas. The best two teams went to the National Final competition, and both years (2017, 2018) they ranked very high (2017 – 1<sup>st</sup> place, 2018 – 2<sup>nd</sup> place).

## 1.1.5 University mechanisms and programs for technology transfer and innovation

The <u>Proof-of-Concept Programme</u> that was developed within the IF4TM project was piloted at the University of Kragujevac beside other 6 Serbian higher education institutions. At the beginning of the project, the <u>D3.5 Operational manual for the Proof-of-Concept</u> was developed.





The Manual provides the set of recommendations and guidelines for researchers on how to validate their laboratory prototypes and research findings and make them more marketable in order to raise their Technology Readiness Level (TRL) and to improve possibility to commercialize their research results. The main objective is to assist and enable the transfer of publically funded research and its results into marketable innovations through the set of support activities:

- Market Research
- Business model development
- Commercialization strategy
- IP evaluation
- Technology/concept validation
- Development of prototype
- Technical feasibility study
- Fundraising or crowd-funding support

The Manual additionally describes in details the eligibility criteria, duration of PoC support, procedures for application and evaluation of submitted PoC projects.

During the 2017 and 2018, the PoC program was implemented and total of 4 research teams from the University applied:

	Project acronym	Title of PoC project	Leading researcher	Institution
1	AUTOCONN	Development of the injectable, living autologous connective tissue	Zoran Milosavljević	Faculty of Medical Sciences Kragujevac
2	Combined Biomass Gasifier	Development of a combined biomass gasifier for the use in combined heat and power systems	Rade Karamarković	Faculty of Mechanical and Civil Engineering in Kraljevo, University of Kragujevac
3	TorqSens	Torque Sensor based on Magneto-mechanical Effect in Commercial Steel	Branko Koprivica	University of Kragujevac, Faculty of Technical Sciences in Cacak
4	HPC	Heat Pump Control	Dragan Pršić	Faculty of Mechanical and Civil Engineering in Kraljevo, University of Kragujevac

Out of them three teams were selected and presented their ideas at the meeting at the Ministry of Education, Science and Technological Development in May 2018 (AUTOCONN, Combined Biomass Gasifier, TorqSens). Based on the support measures agreed and approved at the meeting by Evaluation Committee, the teams received appropriate support.

The most promising team was TorqSens that also had the opportunity to visit the University of Maribor and their laboratories that are relevant for the support to the realization of their





project. The support was received from the colleagues from Slovenia and the progress of the realization of their POC project was presented in the report of this PoC team.

**Open innovation campaigns** represents the concept where companies can improve their competitiveness by opening themselves to the external expertise and knowledge, in this case students and young researchers from the University. In order to realize the OI campaign, the Methodology was developed in December 2017.

The OI campaign targets

- Companies who are willing to share some of their problems and challenges in order to get the external know-how for their solving
- Academic community members who can offer the solutions to the companies based on their research and scientific knowledge, experience and expertise.

Such kind of cooperation offers benefits for both sides: for companies to increase their competitiveness using the know-how they do not have in-house and for students and researchers who can receive valuable rewards, have access to new job opportunities, test their theoretical knowledge and improve their mind-set.

The methodology that was developed within IF4TM project offers the detailed description of the process of submission, presentation and selection of most promising solutions within the campaign.

Another mechanisms that support the creation of innovative culture was development of <u>INNO platform</u> for innovation management. Based on the experience from WBCInno project and noticed advantages and disadvantages of the platform used within this project, **completely new platforms** were developed to serve the needs of the process of Competition for best student ideas and Open Innovation Campaigns. Taking into consideration the dual use of the platform, the INNO platform has two divided sections: section for Competition and Section for Open innovation campaign.

\land IF4TM						👗 zarko gavilo
INNO STUDENT	0			12	<b>₽</b> F	Rang lista ideja
PLATFORMA	Ukupno mojih ideja		Uku	pno svih aktivnih ideja	Faz	a 1 Faza 2 Faza 3 Faza 4
0 Logia	♀ ldeje				1	Agencija za posredovanje u izdavanju stanova Vissnik: Aeksandar Kočović Tim: Studentski ombudsmani
Corisničko ime	Mige idige Odobrene ideje Prikaži 25 * elemenata		Pretraga:		2	Instagram savetovanje Viasnik: Jovana Nikolć Tim: gimazijalke
	Naziv		Datum	Pristup	3	Laserski signal za biciki
ozinka	instagram savetovanje	Jovana Nikolić	29.03.2018	Privatna	3	Viasnik: Jelena Petrović Tim: Fantastična trojka
	Agencija za posredovanje u izdavanju stanova	Aleksandar Kočović	29.03.2018	Privatna	4	Lokator stvari Vlasnik: Mladen Velikić Tim: HAJ56
Login Kreiraj novi nalog	Upotreba F-gasova u industrijskom hladjenju unutras nove regulative	Nevena Aksić	29.03.2018	Privatna		
, ,	Laserski signal za biciki	Jelena Petrović	28.03.2018	Privatna	5	Pčelinji otrov Vlasnik: Jovana Radisić Ter: APITOKSIN
Zaboravljena lozinka?	Virtual waiter	Dušan Milojević	27.03.2018	Privatna		SMART TABLES
	Take Place	Miaden Radojevič	27.03.2018	Privatna	6	Viasnik: Bojana Pajović Tim: NBSolutions
Co-funded by the Erasmus+ Programme of the European Linio	Suncem kroz buducnost	Jelena Balović	27.03.2018	Privatna	7	Studentski e-Servis Srbije Vissnik: Lazar Dražević
of the European Union	Udružena trgovina malih srpskih brendova/firmi	Petar Ocokoljić	24.03.2018	Privatna		Viasnik Lačal Dražević Tim: Biznis Tim

The platform section for Competition is designed in such a way to support all aspects and steps of the Competition. The students who participate in the Competition after creating the account, form the team on the platform that gathers around an idea. Within their team, they can communicate, develop the ideas, post their findings, upload relevant documents, etc. In this way they work in a closed (for other platform users invisible) collaborative space towards the realization of their idea. After each round of competition, the administrators check if all conditions are met for the launching of another round. Once the new round is launched, the current rank list is created with the names of the teams that have passed to the next round.





Since for each round, the teams need to fulfil certain requirements (1<sup>st</sup> round - administrative check, 2<sup>nd</sup> round - scores of the submitted business plan, votes of the video material), the INNO platform also supports this process in the administrative section of the platform. The Platform administrators are allowed to enter results of administrative check and scores of the reviewers based on which the platform automatically rank the student ideas.

As the competition is realized in the first half of the year, and open innovation campaigns in the second half, in the middle of the year the platform is switched to the section for Open Innovation Campaigns.

This section is designed to support the realization of campaigns in line with the developed methodology. The platform offers online form for entering the details on the proposed solution, follows the scoring system and creates the rank list of submitted solutions.

## 1.1.6 Participation of university in establishment of innovative ecosystem at municipal and regional level

The University's impact on establishment of innovative ecosystem at local and regional level is realized at various levels.

Changing of the mind-set of local community through sharing the information on the available support for technology transfer and development of innovations and benefits that the local community can have. This activity targets the groups outside the University such as pupils, companies, local media, local stakeholders, such us:

- Business Innovation Centre Kragujevac,
- Regional Chamber of Commerce in Kragujevac
- Business Start-up Centre Kragujevac,
- Co-working space in Kragujevac
- High school "Prva Gimnazija" in Kragujevac
- Science Technological Park in Cacak
- Entrepreneurial Youth Forum of Chamber of Commerce of Serbia,
- Innovation Fund of the Republic of Serbia,
- etc.

One of mechanisms to achieve this is through **promotion** of activities within TTI dimension of TM that University undertakes for its professors, researchers and students. The promotion is realized through various events and initiatives.

### 1.1.7 Monitoring

Monitoring of the above-mentioned activities (capacity building activities, realization of PoC program, etc.) is carried out by the Business Support Office of the University of Kragujevac and the Creativity Centre of the University of Kragujevac, that keep records on the training participants, attendance rate, perform the statistical assessment, archive the reports and maintain the communication with researchers involved.

Also, the they keep the records on the entire process of the Competition for best student ideas and Open Innovation Campaigns, such as list of participant, contact details, evaluation results, submitted applications, reports, etc.





One of the tasks in monitoring of TTI activities is also administrative support in using of UKG INNO platform and monitoring of its users, opening new accounts, technical support during the competition or OI campaigns for platform users, creating the reports, collecting the statistical data, etc.

### 1.1.8 Financing of TTI activities

During the project implementation, the IF4TM project established cooperation with the Innovation Fund of the Republic of Serbia. Their representative participated in the Evaluation Committee which selected 10 research teams for support within the PoC program. Also, within organization of the Competition for best student ideas UKG team provided sponsored awards for winners in cooperation with Serbian companies.

As one of the support measures for financing innovation projects was possibility for university staff and students to apply for **the Technology Transfer Program of the Innovation Fund**. This support has the aim to stimulate the transfer of results of public research into the private sector and to create products and services that will improve the economy of Serbia within different programs:

- Collaborative Grant scheme
- Mini grants
- Matching grants
- TTF program.

Ten selected teams that participated in PoC program within IF4TM project had the opportunity to get support in application for these TTP programs and this way provide financial resources for development of their innovative solutions.

Another way to secure the financial resources for technology transfer and innovations that was recognized as important is **crowd funding model**. This model has been suggested in the D1.5 Benchmarking report as one of the measures to support the development of ideas and launching the innovations on the market and described in more details in the <u>Guidelines</u> for the development of TTI dimensions of the third mission of universities.

### 1.2 University of Novi Sad (UNS)

### 1.2.1 Institutional policy

The last amendment to the Statute of the University of Novi Sad is from March 8, 2018, where the parts of the Statute regarding the innovation activity, technology transfer, innovation and research and development centers as well as technical tasks have been added.

#### Innovation activity

### Article 19

"University, higher education units and institutes perform innovative activities in order to apply scientific knowledge, technical and technological knowledge, inventiveness and inventory protection in the function of creating and implementing new and improved products, technologies, processes and services and their commercialization, in accordance with the needs of the market and based on a special law."





# Development and Production Center, Research and Development Center and Innovation Center

### Article 43

"The university may establish a development and production center, a research and development cen- ter and an innovation center as an organization for performing innovation activities in accordance with the law. The development and production center is founded as an innovation organization that creates innovations, applies new technologies, markets products, services and technologies based on innovative innovation and development in accordance with the law. The Research and Development Center is established as an innovation organization in which applied and development research is carried out, innovations are created and new knowledge and technologies are placed in their own production and services or in the production and services of other economic entities in accordance with the law. Innovation Center is an innovation organization where the original and systematic way apply its own and other scientific results and modern technological processes, in accordance with the law, in order to create innovations, develop prototypes, new products, processes and services, or improve existing ones in a particular field and at the same time conducts the transfer of knowledge and technology into the production and services of other economic entities, in accordance with the law."

### Business-technology incubator and science-technology park

### Article 44

"The University can establish a business-technological incubator and a science-technology park as a company for providing infrastructure support to innovative activities, in accordance with the law. Business-technology incubator is an entity whose main activity is to provide, with remuneration, business space, administrative, technical and other services to newly established companies or innovative organizations, for a maximum of 5 years from their establishment, in accordance with the law. Scientific and Technology Park is an entity that provides infrastructural and expert services within the defined area to the University, higher education units, scientific and research organizations and innovation organizations in a particular scientific, research and development or production group with the aim of connecting them and making the application of technology, creation and placement of new products and services on the market, in accordance with the law."

The amended Statute of the University of Novi Sad can be found at the following web site: <u>https://www.uns.ac.rs/index.php/univerzitet/dokumenti/category/34-statut-2</u>

### 1.2.2 Development of institutional legal acts

UNS is well recognized as university which nourish entrepreneurship and establishment of spin-off and start-ups in previous period. At the UNS, the Danube Center for Transfer Technology was established as organizational unit of the University of Novi Sad. The goal of establishing the Center is to create a strategy for the promotion of research, innovation, technology transfer, bio-economy, energy, innovation in society and cohesion of the countries of the Danube region.

In order to help and support regulation of Intellectual property rights, the Center for Intellectual property was also established.





The IP at UNS is defined in the Rulebook for Intellectual property rights which draft version can be seen on the following link:

http://www.if4tm.kg.ac.rs/pub/download/15136077080314\_Pravilnik\_IPR\_v01\_UNS.pdf

### 1.2.3 Organizational units dealing with TTI activities

The organizational unit which deal with TTI activities at UNS is the Danube Center for Technology Transfer (DCTT).

The main activities of this Danube Center for Technology Transfer (DCTT) are:

- identification, legal protection and commercial exploitation of intellectual property arising within the University and members of the University (faculty and institute within the University);
- capacity building for technology transfer;
- exchange of knowledge and experiences;
- strengthening the network of partners in the market of the economy in the country and the region.

Products that are subject to DCTT are:

- inventions similar to patent protection or a small patent;
- knowledge and experience ("know how");
- a design that is suitable for protecting the right to industrial design;
- databases that are similar to the protection of the related rights of the database manufacturer;
- computer programs;
- plant varieties similar to the protection of plant variety rights;
- labels that are similar to the protection of the stamp or the right to a geographical indication;
- topographies of semiconductor products similar to the protection of the right to the topography of semiconductor products.

Representatives of the Chamber of Commerce play an important role in the work of the DCTT, especially through a network of business entities, partners, knowledge and experiences that would contribute to better linking the UNS with business entities, both at home and abroad, as well as through participation in the processes of legal protection and commercial exploitation of intellectual property of the UNS and its members.

In addition, UNS has the University Center for Intellectual property (IP Center) which is mission to educate and inform academic, research, business and student society at Novi Sad and Vojvodina in order to promote the role of intellectual property and raise awareness about importance of IP in knowledge based society. Overall goal of the IP Center is to help in IP protection, mainly through writing patent documentation and tracking procedures, as well as to support transfer and commercialization of the knowledge developed through research and creative work at the University of Novi Sad.



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Consultations between researchers from the University interested in protecting their knowledge developed through research and creative work at the University of Novi Sad in form of intellectual property and IP Center experts about potential invention, procedures and possibilities of applying. If an idea is attractive and promising, the next step is to suggest the inventor to prepare detailed invention disclosure. IP Center representative and inventor are signing the document for confidentiality of invention which contains invention disclosure.

Profitability evaluation - analysis of the technical trends and searching through international patent data bases, scientific and other professional literature. An evaluation of commercialization potential of potential invention. From the detailed invention disclosure and result of the profitability evaluation, experts from the IP Center will decide whether to further support patent idea or not. If the answer is yes, the following step is to sign a contract between IP Center and inventor which contains mutual right and obligation, in the other word:

- IP Center takes over obligation to prepare patent application.
- IP Center recommends patent procedures selection of countries, order, and dynamics.

• IP Center takes over obligation to carry procedure of filing and managing procedures toward all international and national IP offices.

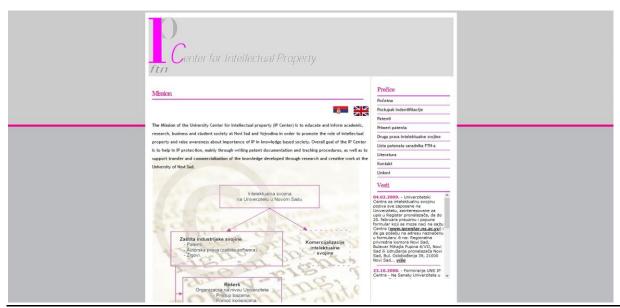
• Inventor will give professional assistance in process of preparation patent application.

• Inventor and IP Center will make their own arrangement regarding paying the expenses made during the period of preparation, applying, tracking and maintaining patent.

• Inventor and IP Center make their own arrangement regarding rights in case of potential commercialization of patent.

In the case that IP Center experts estimate that idea is not promising enough to patent, the IP Center will issue a statement and inventor could continue his work on his own.

IP Center submits patent application, guides and tracks patent procedure. On demand, IP Center is taking part in procedures for commercialization of patent.







The website contain the main information on the Centers for Intellectual property

## 1.2.4 Building capacities and motivating university staff and students to engage in TTI activities

The major activities to motive UNS staff and students to be engaged in TTI activities are the following: (1) Organization of the Competition for Best Technological Innovation; (2) Organization of Competition for the best students' ideas; (3) Organization fair from Science to Industry; (4) Organization of Festival of science and education; (5) Organization of Researchers' night, etc.

At the University of Novi Sad, the Competition for Best Technological Innovation was launched in 2003. The mission of the Competition for Best Technological Innovation is to promote an entrepreneurial innovative climate in Serbia and to help potential and existing high-tech entrepreneurs / researchers who are willing and able to turn their own ideas and inventions into market-valued innovations.

Participation in the Competition, apart from prizes, provides for all competitors:

- free professional training through training and consulting
- Free media support

• Continuous monitoring and assistance in the years following the completion of the participation in the Competition.

The more information related to the Competition for Best Technological Innovation can be found on the following web site: <u>http://inovacija.org/</u>

Additionally, at UNS, the Competition for the best student idea is organized. Students of all levels of the study have the right to participate, and they have opportunity to: (a) develop Business model; (b) validate the business model; (c) prepare short elevator pitch.

More information about the Competition for the Best Student Idea can be found at the following web address: <u>http://www.bsons.uns.ac.rs/index.php?lang=sr&pageview=uslovitakm</u>

## 1.2.5 University mechanisms and programs for technology transfer and innovation

The <u>Proof-of-Concept Programme</u> that was developed within the IF4TM project was piloted at the University of Novi Sad beside other 6 Serbian higher education institutions. At the beginning of the project, the <u>D3.5 Operational manual for the Proof-of-Concept</u> was developed.

During the 2017 and 2018, the PoC program was implemented and total of 2 research teams from the University of Novi Sad applied:

	Project acronym	Title of PoC project	Leading researcher	Institution
1	FOS2D	Robust low-cost fiber- optic 2D deflection	Jovan Bajić	Faculty of Technical Sciences



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		sensor		
2	art- boneFIX	Fixture for fabrication of custom made artificial bone grafts atdental CAD/CAM systems	Igor Budak	Faculty of Technical Sciences

These teams presented their ideas at the meeting at the Ministry of Education, Science and Technological Development in May 2018. Based on the support measures agreed and approved at the meeting by Evaluation Committee, the teams received appropriate support.

The most promising team was FOS2D that also had the opportunity to visit the Instituto Superioro Technico, Lisbon, Portugal and their laboratories that are relevant for the support to the realization of their project. The support was received from the colleagues from Portugal and the progress of the realization of their FOS2D project was presented in the report of this FOS2D team.

**Open innovation campaigns** represents the concept where companies can improve their competitiveness by opening themselves to the external expertise and knowledge, in this case students and young researchers from the University. In order to realize the OI campaign, the Methodology was developed in December 2017.

## 1.2.6 Participation of university in establishment of innovative ecosystem at municipal and regional level

The influence of the University on the establishment of innovative ecosystems at the local and regional level is realized through activities:

- Business Incubator Novi Sad,
- Regional Chambers of Commerce Novi Sad
- Small and Medium Enterprises Development Agency ALMA MONS
- Scientific Technology Park in Novi Sad
- Innovation Fund of the Republic of Serbia.

In addition to the mentioned institutions that have a great influence on the change of the innovative ecosystem, at the University of Novi Sad, events are held each year that have a great impact on young people and older citizens such as:

- Researchers Night - every year, a very large number of people visit the event, starting with children from elementary school, through high school students and elderly people

- Festival of Science - also a very large number of young people visit this very popular event

- Fair – From Science to Industry - is organized for the second year in a row in order to establish cooperation between the scientific institutions and the economy.

### 1.2.7 Monitoring

Monitoring of the activities: capacity building activities, realization of PoC program, Open Innovation Campaign, Competition for best student idea, user of INNO platform is carried out by the Business Support Office of the University of Novi Sad and the Creativity Centre.





One of the tasks in monitoring of TTI activities is also administrative support in using of NNO platform and monitoring of its users, opening new accounts, technical support during the competition or OI campaigns for platform users, creating the reports, collecting the statistical data, etc.

### 1.2.8 Financing of TTI activities

To fund the activities of technology transfer and innovation, there are various programs and projects that can be applied by researchers from the University of Novi Sad, and they can be divided in:

- (1) European funds: application on open calls for H2020, ERASMUS+, COST, Bilateral project, CEI, IPA cross-border cooperation, etc.
- (2) National funds: application to open calls of Provincial Secretariat for Higher education and scientific activities, Ministry of Education, science and technological development, Inovation fund, etc.

All ongoing projects at UNS can be found on this link:

http://www.uns.ac.rs/index.php/c-nauka/projekti-c/po-programima-c

### 1.3 University of Niš (UNI)

### 1.3.1 Institutional policy

The Statute of the University of Niš was adopted in December 2017. The Statute incorporates provisions of the new Law on Higher Education related to the technology transfer and innovations. This particularly refers to the establishment of centers for technology transfer, innovation centers, centers of excellence, science and technology parks, and other units with the aim of commercialization of research results generated at the University.

Article 7 allows establishment of these organization units that perform the innovation activities and provide the infrastructural support for the development of innovations and commercialization of research results. Article 77 defines innovation and technology transfer centers and regulates all the legal aspects of their foundation.

Statute can be found at <u>https://www.ni.ac.rs/dokumenti/aktuelni-pravni-propisi-univerziteta-u-nisu/send/118-aktuelni-pravni-propisi-univerziteta-u-nisu/2373-statut-univerziteta-u-nisu-2017-glasnik-univerziteta-u-nisu-broj-82017</u>

### 1.3.2 Development of institutional legal acts

During the project implementation, University of Niš established the Innovation Center as the organizational unit of the University in which, in an organized and systematic manner,



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university employees work on the application of their own and scientific results of others as well as modern technological processes in order to create innovations, develop prototypes, new products, processes and services or to improve existing ones, and at the same time to transfer the knowledge and technologies in production and services of other economic entities.

Article 77 of the Statute of University of Niš, which was developed and adopted during implementation of IF4TM project based on recommendation of project team involved in project activities on TTI, defines in details all the legal aspects of founded Innovation Center: founding share, management, roles and activities. Later, Innovation center developed the rest of legal acts related to its functioning: contracts. bylaw. statute: http://www.icun.ni.ac.rs/index.php/sr/dokumenta

### 1.3.3 Organizational units dealing with TTI activities

University of Niš established inovation and technology transfer centers in order to improve the possibilities for efficient implementation of scientific and research results achieved at the University, to encourage the transfer of knowledge between the University and the economy, to provide the support for the placement of new technologies and innovations, and to strengthen the awareness about intellectual property and the capacity for technology transfer at the University.

The mission of the Innovation Center of the University of Niš is to contribute to the establishment of an effective national research and innovation system integrated into the European Research Area, which relies on partnerships in the country and abroad and contributes to economic growth, social and cultural progress, as well as raising citizens' standards and quality of life. Its mission is to help protect and manage intellectual property (IP) that arises at the faculties of the University of Nis, to create mechanisms to transfer the rights to the IP industry, which leads to the creation of new products and services for the benefit of society, improve and expand cooperation between the University and industry and provide assistance to researchers and students in achieving their endeavors.

Linking scientific-research organizations and businesses accelerates the emergence of technological innovations, and the connection of science, art and technology with new business models and practice which creates new opportunities for the development of innovative activities. For these reasons, making connections are supported, in the process of creating new intellectual property, as well as in the different stages of development of new products, services and technologies. The Innovation Center of the University of Niš aims to help the research and development efforts of scientists from the University of Nis to lead to the creation of products and services that will increase the quality of people's lives. Goal is that researchers help create new jobs and make Serbia become competitive on the international market.

In order to achieve a defined vision and mission, the following specific goals are pursued:

- Encouraging the excellence and relevance of scientific research in the Republic of Serbia;
- Strengthening the link between science, economy and society to foster innovation;





- Establishing an effective system of science and innovation management in the Republic of Serbia;
- Ensuring the excellence and accessibility of human resources for science and economy;
- Improving international cooperation in the field of science and innovation;

Increase investment in research and development through public funding and encourage investment by the business sector in research and development.

# 1.3.4 Building capacities and motivating university staff and students to engage in TTI activities

Within the mechanisms for building the capacity of university staff and students to be more actively engaged in technology transfer and innovations, University of Nis organized several events and provided the opportunity to its staff to attend events organized by other project partners. University of Nis also promoted the entrepreneurship to motivate students to engage in generation of ideas and innovations.

Two day workshop "Methodology guide for innovation" was organized in March 2017. for both staff and students. The workshop covered topics such as innovations, their modeling and financing, crowd-funding model of financing innovations, IPR protection principles, establishment of the University Innovation Platform in Serbia. The participants also had an opportunity to hear about the experiences of their EU colleagues related to the innovation topics.

The University of Nis organized two local competition for best student ideas where students of all study levels could present their ideas, go through the set of targeted training sessions and receive the support in realization of their ideas. Both years students had an opportunity to attend workshops related to development of their business ideas. First workshop was "Market strategy" and second "Start up training" was two day training related to Business model development and Business model validation as well as idea funding and elevator pitch

At newly created Creativity center workshop for students "With creative thinking to a lot of ideas and potential innovation" was held on 30.10.2018. Participants were introduced to the Creativity and Crea-methods, Six-stage model for collecting ideas in SMEs, The Ultimate Challenge Game, Method 635, Morphology, solution versions, Combinex, choosing an optimal solution, and Reflexion.

# 1.3.5 University mechanisms and programs for technology transfer and innovation

The Proof-of-Concept Programme that was developed within the IF4TM project was announced at the University of Nis beside other 6 Serbian higher education institutions. At the beginning of the project, the Operational manual for the Proof-of-Concept was developed. The Manual provides the set of recommendations and guidelines for researchers on how to validate their laboratory prototypes and research findings and make them more





marketable in order to raise their Technology Readiness Level (TRL) and to improve possibility to commercialize their research results.

During the project realization PoC program was implemented and 3 research teams from the University of Nis applied with their projects:

	Project acronym	Title of PoC project	Leading researcher	Institution
1	MedIn	Device for ultrasound washing and disinfection of medical instruments and vessels	Miroslav Milovanović	Faculty of Electronic Engineering
2	3Phase	3 PHASE voltage converter	Saša Nikolić	Faculty of Electronic Engineering
3	ConBoil	Control system for electric hot water boilers	Nikola Danković	Faculty of Electronic Engineering

Based on decision of Evaluation Committee the teams MedIn and 3Phase visited the Instituto Superioro Technico, Lisbon, Portugal and their laboratories that are relevant for the support to the realization of their project. The support was received from the colleagues from Portugal and the progress of the realization of their projects was presented in the reports.

Open Innovation Campaign represents the concept where companies can improve their competitiveness by opening themselves to the external expertise and knowledge, in this case students and young researchers from the University. In order to realize the OI campaign, the Methodology was developed in December 2017. Another mechanisms that support the creation of innovative culture was development of INNO platform for innovation management. Completely new platforms were developed to serve the needs of the process of Competition for best student ideas and Open Innovation Campaigns. In order to properly manage INNO platform, IT team of the University of Nis prepared, tested and installed the platform on university servers on the December 2018.

## 1.3.6 Participation of university in establishment of innovative ecosystem at municipal and regional level

There are various ways and levels of University's impact on organizing an innovative ecosystem at local and regional level mainly through sharing the information on the available support for technology transfer and development of innovations and benefits that the local community can have. This activity targets the groups outside the University such as pupils, companies, local media, and local stakeholders, such us: Regional Chambers of Commerce, Small and Medium Enterprises Development Agency, City Council, High Schools.





One of mechanisms to achieve establishment of innovative ecosystem is through promotion of activities related to third mission that University undertakes for its professors, researchers and students. The promotion is realized through various events and initiatives: Researchers Nights, Festivals of Science, Fairs.

Laboratories and innovation capacities (human resources and equipment) of University of Niš were mapped and publicly offered during implementation of project on University site <a href="https://www.ni.ac.rs/univerzitet/o-univerzitetu/inovativni-entiteti-univerziteta-u-nisu">https://www.ni.ac.rs/univerzitet/o-univerzitetu/inovativni-entiteti-univerziteta-u-nisu</a>

### 1.3.7 Monitoring

Monitoring of the above-mentioned activities (capacity building activities, realization of PoC program, etc.) is carried out by Creativity Centre of the University of Niš, which keep records on the training participants, attendance rate, perform the statistical assessment, archive the reports and maintain the communication with researchers involved. Also, Centre keeps the records on the entire process of the Competition for best student ideas and Open Innovation Campaigns, such as list of participant, contact details, evaluation results, submitted applications, reports, etc. through UNI INNO platform. One of the tasks in monitoring of TTI activities is also administrative support in using of INNO platform and managing its users, opening new accounts, technical support during the competition or OI campaigns for platform users, creating the reports, collecting the statistical data, etc.

### 1.3.8 Financing of TTI activities

To fund the activities of technology transfer and innovation, there are various programs and projects that can be applied by researchers from the University of Niš:

European projects: H2020, ERASMUS+, COST, Bilateral projects, CEI, IPA cross-border cooperation

National projects: Ministry of Education, science and technological development projects, Innovation fund projects

Another potential way to secure financial resources for technology transfer and innovations that was recognized as important is crowd funding model.

### 1.4 State University of Novi Pazar (SUNP)

### 1.4.1 Institutional policy

The Statute of the State University of Novi Pazar was adopted in April 2018. The Statute incorporates provisions of the new Law on Higher Education related to the technology transfer and innovations. This particularly refers to the establishment of centers for technology transfer, innovation centers, business and technology parks, and other units with the aim of commercialization of research results generated at the University:





• Article 29 includes the provisions related to the establishment of research centers, centers of excellence, science and technology parks and other organizations that perform the innovation activities and provide the infrastructural support the development of innovations and commercialization of research results

Article 40 provide information on rules for establishing and financing of those centers.

Statute can be found on http://np.ac.rs/downloads/univ\_docs/statut-2018-12.pdf

### 1.4.2 Development of institutional legal acts

Statute of State University of Novi Pazar was adopted and developed during implementation of IF4TM project and based on recommendation of project team involved in project activities on TTI. Detailed analysis of the steps and procedures on adopting of the new statute can be find on

http://www.if4tm.kg.ac.rs/pub/download/15387388811975\_Report\_2.3\_SUNP\_v03.pdf

## 1.4.3 Building capacities and motivating university staff and students to engage in TTI activities

Within the mechanisms for building the capacity of university staff and students to be more actively engaged in technology transfer and innovations, the State University of Novi Pazar organized several events and provided the opportunity to its staff to attend events organized by other project partners.

Capacity building training "WIPO Tools for Intellectual Property for the universities" was organized in November 2018. The topic of the training was related to intellectual property management tools at universities developed by WIPO in early 2018 and expected to be publicly announced at the beginning of 2019. The University staff attended this training.

<u>"Methodology guide for innovation"</u> workshop was organized for staff and students in February 2017. The workshop covered topics such as crowd-funding model of financing innovations, IPR protection principles, establishment of the University Innovation Platform in Serbia. The participants also had an opportunity to hear about the experiences of their EU colleagues related to the innovation topics.

State University of Novi Pazar, promote the entrepreneurship to motivate students to engage in generation of ideas and innovations. The University organized two local competition for best student ideas where students of all study levels could present their ideas, go through the set of targeted training sessions and receive the support in realization of their ideas. The best two teams went to the National Final competition, and both years (2017, 2018) they ranked very high (2017 – 2nd place, 2018 – 3nrd place). In order to promote transfer of technology both local competitions were supported by Regional Development Agencies and local self-governments.

## 1.4.4 University mechanisms and programs for technology transfer and innovation

The Proof-of-Concept Programme that was developed within the IF4TM project was piloted at the State University of Novi Pazar. All activities on the programme are implemented in line with operational manual for PoW.

The Manual provides the set of recommendations and guidelines for researchers on how to validate their laboratory prototypes and research findings and make them more marketable in





order to raise their Technology Readiness Level (TRL) and to improve possibility to commercialize their research results. The main objective is to assist and enable the transfer of publically funded research and its results into marketable innovations through the set of support activities:

- Market Research
- Business model development
- Commercialization strategy
- IP evaluation
- Technology/concept validation
- Development of prototype
- Technical feasibility study
- Fundraising or crowd-funding support

The Manual additionally describes in details the eligibility criteria, duration of PoC support, procedures for application and evaluation of submitted PoC projects. During the 2017 and 2018, the PoC program was implemented and one research team from the University applied. Their idea is development of efficient parking system HESIES. They presented their idea at the meeting at the Ministry of Education, Science and Technological Development in May 2018. Based on the support measures agreed and approved at the meeting by Evaluation Committee, the teams received appropriate support. Activities on realization of their POC project was presented in the report of this PoC team. Since this project tackle problem of the parking in urban area cooperation between University and public utility companies was established.

Another mechanisms that support the creation of innovative culture was development of INNO platform for innovation management. Completely new platforms were developed to serve the needs of the process of Competition for best student ideas and Open Innovation Campaigns. Taking into consideration the dual use of the platform, the INNO platform has two divided sections: section for Competition and Section for Open innovation campaign.

In order to properly manage INNO platform, IT team of the SUNP active during preparation of the platform, testing phase ad finally on the December 2018. Platform is installed on the University servers.

## 1.4.5 Participation of university in establishment of innovative ecosystem at municipal and regional level\*

The University's impact on establishment of innovative ecosystem at local and regional level is realized at various levels.

Changing of the mind-set of local community through sharing the information on the available support for technology transfer and development of innovations and benefits that the local community can have. This activity targets the groups outside the University such as pupils, companies, local media, and local stakeholders, such us:

• SEDA – Regional Accredited Developmental Agency





- City of Novi Pazar
- High Schools in Novi Pazar

One of mechanisms to achieve this is through promotion of activities within TTI dimension of TM that University undertakes for its professors, researchers and students. The promotion is realized through various events and initiatives.

Laboratories and innovation capacities of SUNP were mapped during implementation of project and their full resources (human resources and equipment) are presented on University site <u>http://np.ac.rs/yu/centri/inov-kap</u>

### 1.4.6 Monitoring

Monitoring of the above-mentioned activities (capacity building activities, realization of PoC program, etc.) is carried out by Creativity Centre of the State University of Novi Pazar, which keep records on the training participants, attendance rate, perform the statistical assessment, archive the reports and maintain the communication with researchers involved.

Also, they keep the records on the entire process of the Competition for best student ideas and Open Innovation Campaigns, such as list of participant, contact details, evaluation results, submitted applications, reports, etc.

One of the tasks in monitoring of TTI activities is also administrative support in using of SUNP INNO platform and monitoring of its users, opening new accounts, technical support during the competition or OI campaigns for platform users, creating the reports, collecting the statistical data, etc.

### 1.4.7 Financing of TTI activities

One of the measures for financing innovation projects is possibility for university staff and students to apply for the Technology Transfer Program of the Innovation Fund. This support has the aim to stimulate the transfer of results of public research into the private sector and to create products and services that will improve the economy of Serbia within different programs. Another way to secure financial resources for technology transfer and innovations that was recognized as important is crowd funding model.

### 1.5 Belgrade Metropolitan University (BMU)

### 1.5.1 Institutional policy

In accordance to Changes of Law on Higher Education, Belgrade Metropolitan University adapted internal Rulebooks and legal documents. One of them was Statute and some of the Articles are directly connected to technology transfer activities. Particularly it briefly explains role of separate centres more precisely organisational units specialized for innovation and technology transfer.

Articles 35, 36 and 36a refer to separate organisational units within university such as IT Incubator, IT Innovation Centre and Creativity centre.

### 1.5.2 Development of institutional legal acts

Consequently internal legal acts that follow Strategy have been developed.





**Rulebook on Intellectual property rights** at Belgrade Metropolitan University regulates the work and mutual relations of the University, Faculties and units within the University and individuals, as well as other parties in relation to research, assessment, legal protection and economic exploitation of intellectual property created at the University or a member of the University.

### 1.5.3 Organizational units dealing with TTI activities

Organizational units dealing with TTI activities are IT Incubator, IT Innovation Centre and Creativity centre. For now IT Innovation Centre is the one that is working and the other two are still developing. IT Innovation Centre within the Business and Educational Centre of the Belgrade Metropolitan University – Campus in Niš cooperates with IT companies that are interested in joint development of innovations, as well as academics (scholarships, loans or employment of students).

It is important to mention cooperation with Innovative Software Technologies LLC who provides scholarships to BMU students each year for software development. Additionally BMU is organising a form of dual education where with special agreements with companies create models where students work and study in parallel and tuition fees are covered by the company.

## 1.5.4 Building capacities and motivating university staff and students to engage in TTI activities

In order to motivate staff BMU modified Rules and Procedures Relating to the Terms and Confirmation of Appointment, Advancement and Promotion of Members of Academic Staff. Additional selection criteria were added which take into account the achieved results of the teachers on the activities that belong to the third mission of the university. The income that each professor provides for the University within industrial or other projects is highly important in their promotion, so staff is aware that development in third mission is not just a formality.

Students are also motivated to participate especially within Creativity Centre that is adapted for their needs and offers them full equipment for work. BMU is integrated University, so students of all parts areas can gather and work on multidisciplinary projects that are extremely valuable for their careers.

## 1.5.5 University mechanisms and programs for technology transfer and innovation

Each year BMU has open call for the best students who will work on real projects and have scholarships. Additionally call for dual education is opened several times per year with a number of employers that are willing to implement these kind of programmes.

## 1.5.6 Participation of university in establishment of innovative ecosystem at municipal and regional level

BMU cooperates with a lot of stakeholders through different campaigns:

- ICT Community, ICT clusters in Belgrade and Niš and a number of companies in Serbia
- Chamber of Commerce of Serbia
- High schools
- Student associations





### 1.5.7 Monitoring

Monitoring of all activities is at the level of the Rectorate, but supported with Creativity Centre and Marketing service of BMU.

### 1.5.8 Financing of TTI activities

There are three different sources of financing these activities:

- Universities internal sources
- International Projects
- National projects

### 1.6 **Technical College of Applied Sciences (TCAS)**

TCAS drafted a new rulebook to regulate this dimension of the third mission and it was offered to a special commission for reviewing TCAS regulatory documents for further improvement. Unfortunately, due to the internal reorganization it has not been adopted yet.

### 2 <u>Continuing education</u>

### 2.1 University of Kragujevac (UKG)

#### 2.1.1 Institutional policy

The article 37 of the <u>Statute of the University of Kragujevac</u> regulates the realization of **short study programs** with the purpose of professional development and education of individuals with higher education degrees with the aim to facilitate their inclusion in the work process. The short study programs have their structure, purpose and learning outcomes. Upon the completion of the program, the University issues the certificate on the completed program and gained competences.

This provision is in accordance with the new provisions of the new Law on Higher Education.

#### 2.1.2 Legal framework

The **Statue** regulates the roles and responsibilities of the Committee for quality control that is in charge of providing the opinion on the approval of the continuing education programs.

Also, the <u>Strategy for lifelong learning</u> was already adopted at the University of Kragujevac prior to IF4TM project (April 2011). Although the IF4TM project did not participate in the development of the Strategy, it contributed to a large extent to its implementation. The strategic measures that the project supported and contributed to their implementation are as follows:

- Development of programs and modules that will allow individuals to acquire the specific applicable knowledge. Through the project, several trainings for professors, researchers and students of the University of Kragujevac have been





developed and delivered. Those include Workshops "<u>Methodology guide for</u> <u>innovation</u>", <u>training on IP management training on market strategy</u> for staff and <u>students</u> and <u>start-up trainings</u> that include the four modules (Business model development, Business model validation, Finance for start-ups and Elevator pitch) and targets specifically the student population, workshop "<u>With creative thinking on a</u> <u>lot of ideas and potential innovation</u>".

- Mobility to other LLL centres and cooperation with foreign universities within the international projects in the area of the development of lifelong learning and continuing education. Within this project, the University of Kragujevac established the cooperation with partner institutions specifically relevant for continuing education such as Danube University of Krems and University of Bari Aldo Moro, whose valuable experiences and inputs were incorporated in all strategic documents and reports on the project, such as development of D4.1 Guidelines, as well as definition of integrative approach in this area.
- Improvement of legislative framework for application of the concept of continuing education. The <u>D4.1 Guidelines for establishing the integrative approach</u> in continuing education gives the set of recommendations for the procedure of development and approval of continuing education (lifelong learning) programs at the University of Kragujevac. It provides the detailed step-by-step description of those procedures and recommends the forms for application and approval of continuing education programs, realization of CE programs, reporting and issuing certificates.

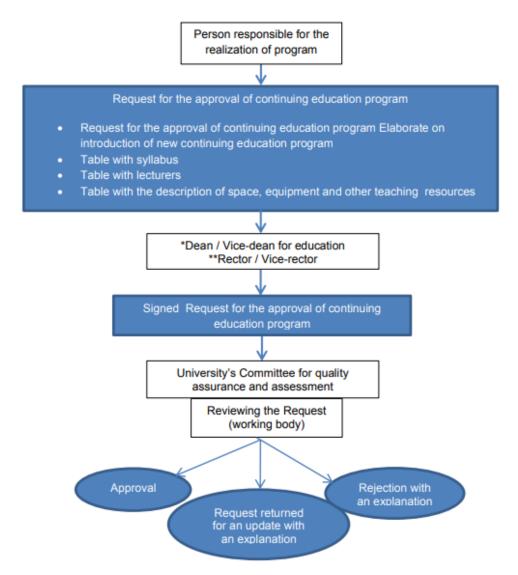
### 2.1.3 Evaluation and approval of CE programs at university level

**Committee for quality control** already has defined roles and responsibilities in terms of evaluation and approval of study programs at the University. In the D4.1 Guidelines for establishing the integrative approach in continuing education, it is recommended to establish a body within existing Committee that would deal only with CE programs, their approval, evaluation and monitoring.

Besides this measure, the Guidelines also developed the recommendation of procedure for the development and approval of CE programs at university level, which is presented in the schematic preview below.







Schematic preview of procedures for development and approval of continuing education programs

The recommended procedure is followed by the models of documents and forms to be used:

Forms for development and approval of continuing education programs								
Number	Form	Submits	Receives / forwards	Approves				
Form 2.1	Request for the approval of continuing education program	Person responsible	*Dean / Vice- dean for education	University's Committee for quality				
Form 2.2 Form 2.3	Elaborate on introduction of new continuing education program Table with syllabus	for realization of program	**Rector / Vice-rector	assurance and assessment (working body)				





Form 2.4	4 Table with lecturers
Form 2.5	5 Table with the description of space, equipment and other teaching resources

Preview of model documents for development and approval of continuing education programs

Special cases are with the faculties that develop continuing education programs for professional development of their employees in accordance with the relevant laws. Such example is Faculty of Medical Sciences that develops programs specially targeting the physicians, specialists and doctors who need to collect certain number of points for participation in these programs in order to maintain their professional licenses.

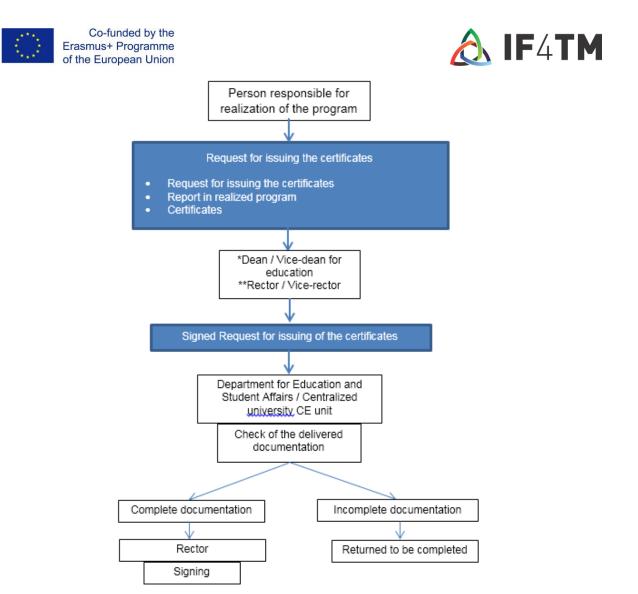
The syllabus and programs are adopted by the Teaching and scientific council and their approval goes through the Health Council of the Republic of Serbia. Upon the completion of the program, the certification are issued to the participants who successfully completed the course, as it is defined in the faculties <u>Statute</u>.

Also, at the Faculty of Pedagogy promotes the continuing education program for development of professional careers of directors, teachers and pedagogues. These programs are accredited at the Office for promotion of education. The <u>Statute</u> of the faculty regulates the tendency of faculty to continually contribute to the improvement of the quality of staff and providing opportunities for permanent professional advancement.

Although IF4TM have not participated in the development of these programs, it doubtlessly contributed to the raising of awareness of importance of participation in CE programs and promotion of the benefits of continuous professional advancement.

### 2.1.4 Quality assurance and control of CE programs

Recommendations for the Quality assurance and control of CE programs are also provided in D4.1 Guidelines for establishing the integrative approach in continuing education, but have not been institutionally adopted in the form of institutional act. They include assessment of learning outcomes, acquired knowledge, skills, and competences of participants at the end of the course, as well as for issuing the certifications on successfully completed programs.



Schematic preview or procedures for reporting and issuing certificates

This procedure as well is accompanied by the proposed models of the documents for reporting and issuing certificates upon the completion of the program of continuing education.

Forms for reporting and issuing certificates								
Number	Form	Submits	Receives / forwards	Approves	Signs			
Form 4.1	Report on realized continuing education program	Person responsible for realization of program	*Dean / Vice- dean for education	University Department for Education and Student Affairs / Centralized university CE unit	-			
Form 4.2	Request for issuing certificates		**Rector / Vice-rector		-			
Form 4.3	Model of certificate				Rector			





### 2.1.5 Organizational units dealing with CE

There are several units dealing with the CE at the level of the University.

<u>Life-long learning center</u> of the University of Kragujevac was established in 2010 within the Tempus project "Development of Lifelong Learning Framework in Serbia", coordinated by the University of Kragujevac. Lifelong Learning Centre is aimed at creating the institutional preconditions for the improvement of formal and informal learning opportunities in order to foster the continuous development and improvement of the knowledge and skills needed for employment and personal development.

<u>Collaborative Training Center</u> Kragujevac is one of the centers from the CTC network established in the Western Balkans region, in the framework of the Tempus project WBC-VMnet. It was founded on June 10, 2010 as an organizational unit of the University of Kragujevac. Considering the importance and necessity of cooperation between the universities and enterprises, the main strategic goal of the center is to coordinate and enhance cooperation, to facilitate knowledge and technology transfer and to provide opportunities to students and graduates to gain practical knowledge.

<u>Business Support Office</u> of the University of Kragujevac was established within the TEMPUS project WBCInno with the decision of the University Council of 29 April of 2014, in order to make research and innovation potential of universities available the business environment and to support the development of the ideas of researchers and students. Within its activities, the Center provides the several types of trainings for its users.

<u>Center for Career Development and Student Counselling</u> through its workshops and courses provides the support to students to develop knowledge and skills necessary in the labor market. Those events include April Workshop (support to young people for finding a job, skills of academic writing, skills of communication and presentation, interview with an employer, writing of CV and motivational letter, etc.), Emotional Literacy, English language courses, summer practical placements and other courses.

# 2.1.6 Promotion of continuing education at universities and incentives systems for participants

The promotion of the continuing education activities goes into various directions and takes different forms. The most common way is promotion and sharing information on the websites.

The announcement of the forthcoming CE events are posted on the <u>University website</u> with the basic information on the topics, target groups and schedule of the event, on the website of the <u>Collaborative Training Centre</u>, <u>Busi Support Office</u> and the <u>Center for Career</u> <u>Development</u>.

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Радионица "Осмишљавање и разво	ј пословних идеја", 7. јун 2018.		
iii 30.05.2018. <b>&gt;</b> Пројекти			
Srbija", и пројекат "Локални развој отпоран н и Програм Уједињених нација за развој (U областима одрживог развоја и борбе против Радионица је намењена студентима свих нивоа	р Еразмус+ пројекта IF4TM, Привредна комора Србије, Прогр. на климатске промене" кога спроводе Министарство заштите жи ЛИDР), организују радионицу о осмишљавању и развоју посл климатских промена. а студија, укључујући и докторске студије (млађи истраживачи), удентима на економским и другим факултетима (нпр. организаци	ивотне средине ловних идеја у на природно-математичким	
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lамера нам је да пружимо вредност учесницима (студентима и млађим истраживачима), тако што ћемо, применом иновативних метода и техника, утицати а знања из својих доменских области преточе у пословне идеје, које их могу инспирисати да позитивно утичу на окружење и заједницу у којој живе.			
Радионица у Крагујевцу је планирана за 7. тополиваца 4.	јун 2018. у трајању од 9:00 до 17:00, а одржава се у Бизн	нис иновационом центру,	на адреси Трг
Агенду можете преузети <u>овде</u> .			
Своје учешће можете пријавити путем он-лине ф	ете пријавити путем он-лине формулара који је доступан на линку <u>https://goo.gl/xom1bK</u> најкасније до <b>6. јуна 2018.</b>		
Очекујемо Вас!			

#### Example of the announcement of a CE event at the University's website

Additional to this, announcements and promo information are sent to the potential users through the mailing contact lists of employees and students through the International Project Office, Business Support Office and the Centre for Career Development.

In the section events on the IF4TM project website, the news on each event is posted with a brief report on the realized course/program with the agenda and list of participants.

For the faculties' programs of continuous education, the announcement and news are posted on the websites of relevant faculties (<u>Faculty of Medical Sciences</u>, <u>Faculty of Pedagogy</u>, <u>Faculty of Engineering</u>, etc.).

Information about continuous education activities can be also find in on/line Catalogue on the <u>BSO web site of the University of Kragujevac</u>. At this electronic Catalogue, potential users can search for available courses and trainings using the Search function and filter them against the different criteria (institution, course name, etc.).

Besides the efforts to make those CE programs publically visible, one part of the promotion is realized through the publication of mapping of CE activities at the University of Kragujevac and its faculties that was carried out within the IF4TM project. The <u>Report on mapping of CE activities</u> is publically available at the project website. The report provides the results of the mapping collected from the questionnaires sent to the management of 12 faculties and its professors, researchers and associates. These results include among other information, the list of available CE programs and courses at the faculties within the University of Kragujevac.

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CAM modelling and generating NC code for 3 axis CNC milling machines	Collaborative Training Centre of the University of Kragujevac - CTC	Training		
Dynamic analyses of power transmissions	Centre for testing and calculation of machine elements and systems - CIPMES	Training		
Electronic medical devices	Collaborative Training Centre of the University of Kragujevac - CTC	Training		
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# 2.1.7 Monitoring

Monitoring of the CE activities is carried out at various levels. Each University unit dealing with CE activities is responsible for monitoring of the events they organize. In this sense, the BSO office, LLL center, Centre for Career Development, CTC center gather information on the realized CE activities, number of participants, they perform the statistical analysis and develop reports.

Some information they gather and process are made publically available at their websites, whilst the other are kept in those units' archives and are used to inform the University management when requested.

# 2.2 University of Belgrade (UBG)

# 2.2.1 Institutional policy

The Statute of the UBG

With an aim of integrating higher education, science and practice Statute of the University of Belgrade in its Article 16 defines that The University and faculties mentioned in the Article 10, Paragraph 2, Point 1 of the Statute may found legal entities i.e. branches whose activities shall integrate higher education, science and practice, such as technologies transfer centre, innovation centre, business-technology park and other similar organisational units, pursuant to the Law.

The University's decision on founding legal entities i.e. branches mentioned in Paragraph 1 of this Article shall be rendered by the Council, upon the Senate's proposal; the faculty's decision shall be made by its managing body, pursuant to the Statute of the faculty.

The Statute also defines that The University i.e. faculty may independently or together with other higher education institutions implement lifelong education programmes (hereinafter





referred to as: permanent improvement programmes) outside the scope of their studying programmes for which they have operating license.

The permanent improvement programmes shall be established by the Senate i.e. teaching and scientific council of the faculty.

The permanent improvement programmes shall be implemented as courses, seminars, workshops, expert and scientific counselling and other forms of improvement, where the course-takers have the opportunity to learn specific professional and scientific fields so as to broaden and deepen their knowledge and effective practical work.

Terms, conditions and procedure of implementation of the permanent improvement programme shall be established in the general act adopted by the Senate upon the Rector's proposal i.e. the proposal of the teaching and scientific council of the faculty.

The course-takers of the permanent improvement programme may be persons with at least secondary education.

Persons enrolled in the programme mentioned in Paragraph 1 of this Article shall have no status of a student as defined in this Statute.

Persons passing the permanent improvement programme shall be issued a certificate by the higher education institution in the format defined by the Senate.

# Source:

# http://www.bg.ac.rs/sr/univerzitet/univ-propisi.php

# 2.2.2 Legal framework

UBG Strategy of lifelong learning and the Centre for Lifelong Learning

University of Belgrade enacted a Strategy of lifelong learning. This strategy is motivated by the knowledge that the current educational system is based on the assumption that education is acquired primarily in youth, in schools and colleges and that the reforms of educational system in Serbia pay little attention to lifelong learning. Given the strategic goal of Serbia to join the European Union in the future, it is necessary to try to build an education system that will be based on the modern achievements of a united Europe, which includes an obligation the adoption a clear and comprehensive strategy for lifelong learning. Adoption of a strategy alike is not only important for the fulfilment of 'European objectives' but also for the transition of Serbian society into knowledge society and knowledge economy. In accordance with the Strategy, University of Belgrade set the following as its long-term goals:

- Promoting a culture of learning and education
- Strengthening cooperation and networking at national and international level
- The development of core competencies that are considered as prerequisites for contemporary literacy
- Social development and reduction of unemployment
- Flexibility and accessibility of education

Sources:

- <u>http://www.bg.ac.rs/en/members/centers/lifelong-learning.php</u>
- <u>http://www.bg.ac.rs/en/members/centers/career-developement.php</u>
- http://www.bg.ac.rs/sr/univerzitet/univ-propisi.php





### 2.2.3 Evaluation and approval of CE programs at university level

The university or faculty may independently or in cooperation with other higher education institutions implement life-long learning programs outside of the study programs for which they have a work permit.

Life-long learning programs are determined by the Senate, that is, the teaching-science council of the faculty.

Life-long learning programs are realized through courses, seminars, workshops, professional and scientific consultations and other forms of training, in which participants get acquainted with certain fields of profession and science in order to broaden and deepen the acquired knowledge and successful work in practice.

The conditions, method and procedure for the realization of life-long learning programs shall be regulated by a general act adopted by the Senate, on the proposal of the rector or faculty council.

### Participants

(1) Attendants of life-long learning programs may be persons with previously acquired at least secondary education.

(2) A person enrolled in the life-long learning programs shall not have the status of a student in the context of this Statute.

(3) A person who completes a life-long learning programs is issued a certificate by a higher education institution, on the form prescribed by the Senate.

#### Source: Statute of UBG http://www.bg.ac.rs/sr/univerzitet/univ-propisi.php

# 2.2.4 Quality assurance and control of CE programs

The Strategy of Quality Assurance UBG

The mission of the University of Belgrade is to provide superior education and exceptional knowledge to its students, not only in terms of their intellectual growth and development, but also in terms of growth and development of their human qualities and ethical values, and inspiring their wish and inclination to be leaders; moving the boundaries of knowledge and higher education, promoting intellectual surroundings which cherishes and honours true values, respect and accepting people's differences and devotion to knowledge, development and human values.

Devoted to studying, education, progress and prosperity, the University of Belgrade strives to set the strongest standards in higher education, to cherish and encourage intellectual and personal growth and to stimulate meaningful work and effort which serve to the well-being of the entire society.

# Source: <u>http://www.bg.ac.rs/sr/univerzitet/univ-propisi.php</u>

# 2.2.5 Organizational units dealing with CE

Centre for Lifelong Learning of the University of Belgrade, established in 2011, improves and promotes the system of lifelong learning, and provides the support to individuals interested in further education and expert training. The key activities of the Centre are:



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- development of the system of lifelong learning at the University of Belgrade
- coordination of the work of centers for lifelong learning at member faculties
- providing information about programs and courses in the field of lifelong learning
- counseling for individuals interested in lifelong learning programs
- promotion of lifelong learning courses
- research in the field of lifelong learning services (the needs of potential clients, etc.)
- establishment of academic, scientific and expert cooperation with other institutions in the country and abroad engaged in lifelong learning.

### Sources:

http://www.bg.ac.rs/en/members/centers/lifelong-learning.php

# 2.2.6 Promotion of continuing education at universities and incentives systems for participants

The major goal of the Centre for Lifelong Learning is to create a connection between the employers and the recently graduated students, to develop the awareness among students about the modern-days requirements. Student need to develop practical skills and increase capabilities in order to be prepared for the rapidly changing labour market. Employers want more than Faculty diplomas. The Centre is here to assist students to develop skills and knowledge relevant for employment, to gain work experience during the studies, to learn about the business world and its rules, as well as to think about options in a constructive way, in order to be prepared for the next step, after graduation. The Centre promotes students and graduates of Belgrade University as future experts in different areas of business and promotes the University of Belgrade as a leading institution of higher education in the region.

# 2.2.7 Monitoring

The Council of the Centre for Lifelong Learning is in charge of monitoring the work of the Centre. The Rector of the University of Belgrade appoints one of the Vice Rectors as the President of the Council. The Council consists of the appointed Vice Rector, and one representative of each Academic Council at the University of Belgrade. The President of the Council manages the work of the Council and is in charge of the implementation of its decisions.

# 2.3 University of Novi Sad (UNS)

# 2.3.1 Institutional policy

The Statute of the University of Novi Sad defines the field of Continuing Education of Article 103.

# **Continuing Education**

Article 103

"The university, or higher education unit, can, independently or in cooperation with other higher education institutions, implement education programs throughout their lives outside of the study programs for which they have a work permit.

Educational programs throughout the life are determined by the Senate, that is, the teachingscientific council of higher education units.

Educational programs throughout their lives are realized through courses, seminars, workshops, professional and scientific consultations and other forms of training, where





students are introduced to specific fields of expertise and science in order to broaden and deepen the acquired knowledge and successful work in practice.

An institution shall issue a certificate to the person who has mastered the program referred to in paragraph 1 of this Article.

A person enrolled in the program referred to in paragraph 1 of this Article shall not have the status of a student, in the sense of the law and this Statute.

The conditions, method and procedure for the realization of education programs throughout their lives are regulated by a general act adopted by the Senate or higher education unit."

### 2.3.2 Legal framework

The University Centre for Lifelong Learning was already established at UNS thanks to the project DELFIS ("Development of lifelong learning framework in Serbia", 145010-1-2008-RS-TEMPUS-JPHES), with UNS team leader prof. Pere Tumbas and the created Rulebook additionally regulate this field at UNS. Furthermore, it will be a good opportunity to apply for participation in

European Universities Continuing Education Network (EUCEN).

The LLL at UNS is defined in the Rulebook for Life Long Learning which draft version can be seen on the following link:

http://www.if4tm.kg.ac.rs/pub/download/15136077082672\_PravilnikLLLUNS-MRv01.pdf

#### 2.3.3 Evaluation and approval of CE programs at university level

Implementers (Faculties, Institutes, Centers) must use flexible teaching methods based on information and communication technologies with the possibility of creating conditions for virtual learning and realization of virtual programs, for virtual mobility in the field of lifelong learning for the realization of lifelong learning programs / courses.

Faculties, institutes, centers within the UNS can cooperate in the realization of lifelong learning content, especially by organizing interdisciplinary and multidisciplinary lifelong learning programs.

Faculties, institutes and Centers at UNS which organize lifelong learning courses and programs are obliged to ensure the availability of lifelong learning topics and programs for all categories of users, in a way that is acceptable to them and appropriate.

Lifelong learning contents must be available to various social groups and categories of the population, such as: employed and unemployed persons, employers, entrepreneurs, persons in the mature age who face the risk of losing their jobs, highly educated persons with the needs of professional and personal development, and others.

The system of evaluating the scope of mastered life-long learning programs is also based on ESPB points, which can be used as a basis for enrollment in other educational programs (regular or lifelong learning) or for the renewal of the license and other work licenses.

The certificate of a completed program / lifelong learning course must include the following:

- University logo and full name
- Name of the Faculty, Institute or Center where the program / course was held
- Name and surname of the participants
- The exact name of the program / course
- Time classes
- Number of ESPBs achieved
- Signature of the Rector of the University



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- Seal University
- Date and place of issue of the Certificate

# 2.3.4 Quality assurance and control of CE programs

The quality control of all study programs taking place at the faculties within the University of Novi Sad is clearly defined in Article 183 of the Statute of the University of Novi Sad:

# Quality system

# Article 183

"The university and higher education units and institutes carry out the process of selfevaluation and assessment of the quality of their study programs, teaching and working conditions.

Self-evaluation shall be carried out in a manner and in accordance with the procedure prescribed by the general act of the University and the higher education unit and institute.

Self-evaluation is carried out at intervals of up to three years.

The university and higher education units and institutes are obliged to define bodies and procedures for monitoring, securing and improving quality, including regular self-evaluation procedures."

# 2.3.5 Organizational units dealing with CE

The University of Novi Sad (UNS) is a functionally integrated university - it comprises of 14 faculties with the status of legal entities. Each faculty has already developed a set of workshops, lectures, courses and other kinds of organized training, offered in a framework of lifelong learning (LLL) at that specific faculty. At the UNS level, the University Centre for Lifelong Learning is organization unit dealing with CE.

# 2.3.6 Promotion of continuing education at universities and incentives systems for participants

Faculties, institutes and Centers that organize lifelong learning courses and programs are obliged to ensure the availability of lifelong learning topics and programs for all categories of users, in a way that is acceptable to them and appropriate.

For the faculties' programs of continuous education, the announcement and news are posted on the websites of relevant faculties (Faculty of Technical Sciences, Faculty of Medicine, Faculty of Technology, etc.).

# 2.3.7 Monitoring

Committees for Quality control at the Facilities level are responsible for monitoring the quality of LLL programmes.





#### 2.4 University of Niš (UNI)

#### 2.4.1 Institutional policy

Senate of the University of Niš declared founding act of the Centre for Lifelong Learning (LLL) in December 2012 with purpose to define duties and organizational structure of the Centre. Statute of the University of Niš defines the roles of the Centre in the Article 81.

Sources: <u>https://www.ni.ac.rs/dokumenti/aktuelni-pravni-propisi-univerziteta-u-nisu/send/118-aktuelni-pravni-propisi-univerziteta-u-nisu/2373-statut-univerziteta-u-nisu-2017-glasnik-univerziteta-u-nisu-broj-82017</u>

https://www.ni.ac.rs/dokumenti/send/37-broj-8-od-18122012-god/152-3-odluka-o-osnivanjucentra-za-dozivotno-ucenje-univerziteta-u-nisu

#### 2.4.2 Legal framework

This Centre coordinates and cooperates with foreign universities in the framework of international projects in the field of lifelong learning; organizes trainings for acquiring the key competencies in the system of lifelong learning, defined by the EU: communication in native and foreign language, competences in mathematics, science, technology, information and communication technologies and social interaction; develops initiatives and entrepreneurial spirit. It also provides consulting assistance to interested employers in terms of the type of knowledge, most appropriate for them, with respect to the type of business, technology and market trends; establishes a network with local partner institutions, such as the city of Nis, Regional Chamber of Commerce, Union of Employers, the National Service Employment and others; connects to the partners in the relevant EU institutions.

For a few years of existence Centre already achieved measurable results. In the future, it is necessary:

- to perform further survey among users of the Centre for Lifelong Learning (several surveys have been already done) by filling the existing questionnaire;
- to perform further familiarization of students, professors, associates and employees of the University of Nis with the idea of lifelong learning;
- to establish more effective cooperation with local partner institutions (the city of Nis, municipalities of Nis, Regional Chamber of Commerce, Union of Employers, National Employment Agency, Association of Entrepreneurs, Craftsmen Association, Clusters);
- to establish an active team for everyday activities at the Centre and in the field (field visits to the companies and institutions and interviewing of employees);
- to organize "evening schools" for employees.

Activities that center provides are defined by the decision about foundation of the Center for LLL and Statute of the University of Nis.





Sources: <u>https://www.ni.ac.rs/dokumenti/aktuelni-pravni-propisi-univerziteta-u-nisu/send/118-aktuelni-pravni-propisi-univerziteta-u-nisu/2373-statut-univerziteta-u-nisu-2017-glasnik-univerziteta-u-nisu-broj-82017</u>

# https://www.ni.ac.rs/dokumenti/send/37-broj-8-od-18122012-god/152-3-odluka-o-osnivanjucentra-za-dozivotno-ucenje-univerziteta-u-nisu

Senate of University of Niš also adopted the strategy on continuous training of researchers. With this strategy, the University recognizes the need to provide researchers the opportunity for professional development through appropriate education in order to develop their skills and competences. Providing support to young researchers when introducing them into scientific research and directing them during career development are recognized as an important area in human resource management. Special importance is given to the organization of working conditions and conditions of training at early stage of the career of researchers. In that sense, systematic activities are needed in identifying the real needs of researchers for training in order to develop their skills and appropriate competences that are relevant and necessary for their research work.

Strategy deals in details with questions of institutional, national and European legislature concerning this topic, promotion of science, training of researchers (PhD studies, methodology of research, ethical principles, open science), international cooperation and mobility of researchers as well as promotion and sustainability of the strategy.

# 2.4.3 Evaluation and approval of CE programs at university level

Centre uses courses organized by the National Employment Service to involve participants in the programs of additional education and training, thus providing them an opportunity to gain new knowledge and skills and increase the chance of finding a job. Centre encourages use of Alumni Centre of University of Nis, which allows students to connect and improve the scientific, professional, educational, business and personal cooperation. There is also alumni group on LinkedIn, which aims to bring together all alumni of the University and facilitate mutual communication, sharing memories, experience and knowledge. Regional Chamber of Commerce represents the interface between the University and companies with purpose to increase the number of employees involved in courses and trainings provided by the Centre for Lifelong Learning of University of Nis. The city of Nis and local municipalities, through which a cooperation network with local governments is established, use the services of the Centre. Members are informed about potential courses and recognize the need to acquire the appropriate knowledge in the areas of interest for entrepreneurs and craftsmen are gained through the Union of Employers, the Association of entrepreneurs and craftsmen. Employees at the Faculties of University of Nis, who follow and participate as beneficiaries or contractors in trainings within the Centre for Lifelong Learning are also recruiters for new courses

- Promotional workshop, with discussions on the challenges, the recommended strategies and expected results of lifelong learning, natural connection and the expected continuity of normal school education and adult education.
- Workshop for promotion of permanent education courses as part of the TEMPUS project IPROD (Improvement of Product Development Studies in Serbia and Bosnia





and Herzegovina): Rapid prototyping, Structural Analysis, Innovation Management and Industrial Product Development.

Continuing education courses in the following areas: Protection of intellectual property – Patents and Patent documentation; Structural analysis; Rapid prototyping; Innovation management; Basis of 3D modelling in CAD software; Calculation of machine elements using modern software; Design for Manufacturing (DFM); Design for Assembly (DFA); Industrial Design; Design for Excellence (DFX); Design of technological process of product manufacturing.

The programs are approved by the Senate and Committee for quality assurance and assessment.

Sources: <u>https://www.ni.ac.rs/dokumenti/aktuelni-pravni-propisi-univerziteta-u-nisu/send/118-aktuelni-pravni-propisi-univerziteta-u-nisu/2373-statut-univerziteta-u-nisu-2017-glasnik-univerziteta-u-nisu-broj-82017</u>

# 2.4.4 Quality assurance and control of CE programs

Quality assurance and control of CE programs are provided in Guidelines for establishing the integrative approach in continuing education. The institutional act does not exist yet, but all Faculties that provides CE programs are obliged the have quality assurance and control through their own Quality control committees at Faculties.

# 2.4.5 Organizational units dealing with CE

Two centers, the Centers for LLL and Career Development at the University of Nis are directly competent for providing CE programs. In addition, Faculties are responsible for organization CE programs and the list of available ones are given in a <u>Report on mapping of CE activities at UNI.</u>

# 2.4.6 Promotion of continuing education at universities and incentives systems for participants

The announcement of the forthcoming CE programs are posted on the webpage of the <u>Center for LLL at University website</u> with the basic information on the available courses and other activitie

s related to the promotion of the continuing education.





#### 2.4.7 Monitoring

Monitoring is provided by all Faculties that provides their courses, programs are obliged the have quality assurance and control through their own Quality control committees at Faculties.

#### 2.5 State University of Novi Pazar (SUNP)

#### 2.5.1 Institutional policy

Statute of the State University of Novi Pazar (<u>http://np.ac.rs/downloads/univ\_docs/statut-2018-12.pdf</u>) regulates the realization of short study programs in line with new Law on Higher Education in article 27. The short study programs have their structure, purpose and learning outcomes. Upon the completion of the program, the University issues the certificate on the completed program and gained competences.

Establishment and role of the Life Long Learning Centre as important part of CE effort are defined in the article 47.

### 2.5.2 Legal framework

The Statue regulates the roles and responsibilities of the LLC in development and proposition of CE activities, quality of the delivered courses are examined by the quality assessment committee whose roles and responsibilities are provided in article 78 of the statute.

Development of programs and modules that will allow individuals to acquire the specific applicable knowledge. Through the project, several trainings for professors, researchers and students of the SUNP have been developed and delivered. Those include Workshops <u>"Methodology guide for innovation"</u>, <u>training on IP management</u> and <u>training on market strategy</u> for staff and students and start-up trainings that include the four modules (Business model development, Business model validation, Finance for start-ups and Elevator pitch) and targets specifically the student population.

During project implementation SUNP adopted and implemented set of recommendations for the procedure of development and approval of continuing education (lifelong learning) programs at the University from <u>Guidelines for establishing the integrative approach in continuing education</u>.

#### 2.5.3 Evaluation and approval of CE programs at university level

State University of Novi Pazar can independently or in cooperation with other higher education institutions implement life-long learning programs. CE programs are adopted by the Senate, that is, the teaching-science council of the university.

CE programs are realized through courses, seminars, workshops, professional and scientific consultations and other forms of training, in which participants get acquainted with certain fields of profession and science in order to broaden and deepen the acquired knowledge and successful work in practice.

The conditions, method and procedure for the realization of life-long learning programs are regulated by a general act adopted by the Senate, on the proposal of the rector or university council.





#### Quality assurance and control of CE programs 2.5.4

Recommendations for the Quality assurance and control of CE programs are also provided in Guidelines for establishing the integrative approach in continuing education, but have not been institutionally adopted in the form of institutional act. All recommendation like assessment of learning outcomes, acquired knowledge, skills, and competences of participants at the end of the course, as well as for issuing the certifications on successfully completed programs are already covered by statute definition of quality assessment committee of University.

#### Organizational units dealing with CE 2.5.5

There are several units dealing with the CE at the level of the University.

Life-long learning center of the State University of Novi Pazar. Lifelong Learning Centre is aimed at creating the institutional preconditions for the improvement of formal and informal learning opportunities in order to foster the continuous development and improvement of the knowledge and skills needed for employment and personal development.

Career Center of State University of Novi Pazar provides workshops and courses provides the support to students to develop knowledge and skills necessary in the labor market. This Center also track information of the Alumni of the University.

#### 2.5.6 Promotion of continuing education at universities and incentives systems for participants

The announcement of the forthcoming CE events are posted on the University website with the basic information on the topics, target groups and schedule of the event.

Besides the efforts to make those CE programs publically visible, one part of the promotion is realized through the publication of mapping of CE activities at the State University of Novi Pazar and carried out within the IF4TM project. The Report on mapping of CE activities is publically available at the project website.

Since acquiring knowledge on intellectual property and entrepreneurship during the academic studies is very important for improvement of professional competences regardless of the future professional orientation of students. SUNP used results of mapping to implement topics of the IP in the three courses on different study programmes as given in integrated report.

#### 2.5.7 Monitoring

Monitoring of the CE activities is carried out on the same way like other activities of State University of Novi Pazar. Information and all relevant data are under supervision of Quality control office and adequate documentation is kept in archives and are used to inform the University management when requested.

#### 2.6 **Belgrade Metropolitan University (BMU)**

#### 2.6.1 Institutional policy

The article 33 of the Statute of the Belgrade Metropolitan University regulates the realization of Center for Continuing Education with the purpose of professional development and education of individuals with the aim to facilitate their inclusion in the work process. The programs have their structure, purpose and learning outcomes. Upon the completion of the





program, the University issues the certificate on the completed program and gained competences.

#### 2.6.2 Legal framework

<u>Rulebook on Life Long Learning</u> at Belgrade Metropolitan University defines the organization and realization of various professional development programs with a duration of up to one year, outside the framework of the accredited study programs of the University.

Life-long learning is defined as a purposeful and continuous process of adopting and processing information from an individual in order to enhance his knowledge, skills and abilities. This process takes place in different conditions and takes place in all its ages.

Faculties, Centres and other units within the University work on the construction and development of institutional bases and support in the realization of lifelong learning at the University.

#### 2.6.3 Evaluation and approval of CE programs at university level

University and faculties within the University are obliged to carry out the process of selfevaluation and quality assessment, in accordance with the Quality Assurance Strategy for the purpose of continuous and systematic work on improving the quality of study programs, teaching, scientific and artistic work, teaching and non-teaching staff and students, and management processes.

The process of self-evaluation at the University is conducted by a commission formed by the Senate of the University, on the proposal of the Commission for quality from the teaching, non-teaching staff and students.

A written questionnaire-answer questionnaire is the basic student evaluation tool. Student surveys are anonymous. The questionnaire contains questions on which answers can provide information on the quality of the study program, teaching process, working conditions and pedagogical work of teachers. The compulsory content of the questionnaire for self-evaluation is prescribed by the forms that are attached to this Rulebook. In addition to the mandatory content, the Commission may supplement the questionnaire with additional questions or modify them during the evaluation process.

# 2.6.4 Quality assurance and control of CE programs

The mission of the Belgrade Metropolitan University is to provide education and exceptional knowledge to its students, not only in terms of their intellectual growth and development, but also in terms of growth and development of their human qualities and ethical values; moving the boundaries of knowledge and higher education, promoting intellectual surroundings, devotion to knowledge, development and human values. For this purpose, a Quality Center was established.

The Quality Center defines the strategy and policy of monitoring, security, improvement and development of quality, and performs administrative and organizational tasks related to self-





evaluation and raising the quality of study programs, teaching and working conditions of the University and higher education units.

The quality body of the Quality Center is the Quality Assurance Commission, which appointed by the Senate for a period of three years. The Quality Assurance Committee has its members and presidents teachers and associates from all educational-scientific and educational-artistic fields, as well as from the rank of students and non-teaching staff.

The quality of the Center for Quality is more closely regulated by the General Senate Act.

# 2.6.5 Organizational units dealing with CE

Center for Continuing Education "Pro Academy" is basic the organizational unit of the University providing educational services by realization:

- courses of continuous (lifelong) education outside of the curriculum study programs of the University,
- short programs (cycles) in accordance with the Law on Higher Education, as well
- services related to the successful transfer of modern technologies and methods of work to organizations.

# 2.6.6 Promotion of continuing education at universities and incentives systems for participants

The promotion of the continuing education activities goes into various directions and takes different forms. The most common way is promotion and sharing information on the websites.

The announcement of the forthcoming CE events are posted on the <u>University website</u> with the basic information on the topics, target groups and schedule of the event. Additional to this, announcements and promo information are sent to the users through the mailing contact lists of employees and students.

#### 2.6.7 Monitoring

Faculties, Centers and other units within the University work on the construction and development of institutional bases and support in the realization of lifelong learning at the University. The course implementers follow the needs and expectations of the participants and other users with the contents necessary for their professional development (by filling in the questionnaire, etc.). The course and program implementers work to increase the awareness of the users about the forms and contents offered at the University through seminars, workshop and other.

# 2.7 Technical College of Applied Sciences (TCAS)

TCAS drafted a new rulebook to regulate this dimension of the third mission and it was offered to a special commission for reviewing TCAS regulatory documents for further improvement. Unfortunately, due to the internal reorganization it has not been adopted yet.



#### 3 <u>Social engagement</u>



# 3.1 University of Kragujevac (UKG)

#### 3.1.1 Institutional policy

The University of Kragujevac developed within the IF4TM project the <u>Individual Social</u> <u>Engagement Plan</u> that defines the activities to be undertaken in terms of strengthening the university as a socially responsible institution. The social engagement of the University is defined through engaged research, engaged education and social engagement of university, its staff and students.

#### 3.1.2 Legal framework

The University of Kragujevac has the <u>Act on the criteria for professional advancement</u> that was adopted in January 2017. The Act regulates closely the procedure for employment of teachers and requirements and criteria for assessment of results of scientific and research work of the candidate.

Besides other requirements, the criteria for selection and appointment include the set of elective elements such as professional development, contribution to the academic and wider community and cooperation with other higher education, research and cultural institutions.

Contribution to the academic and wider community includes the criteria relevant for social engagement such as:

- Membership in national and international professional organizations of public interest
- Membership in professional organizations
- Participation in the work of committees, legislative bodies, professional organizations, etc.
- Promotion of science.

As far as students are concerned, the <u>Act on evaluation of extracurricular activities of the</u> <u>students of University of Kragujevac</u> that was adopted in May 2018, regulates the terms and conditions for evaluation of these activities. Extracurricular activities defined by the Act are engagement in the University's and faculties permanent or temporary organizational bodies, participation in student parliament, professional and student practical placements, volunteering activities in local community, competitions, participation in summer schools, workshops and conferences, work with disabled students, etc.

For each of the above-mentioned activities, a certain number of ECTS credits are assigned by this Act. For instance, for volunteering activities such as:

- For volunteering at manifestations organized by the state, university and faculty (university Olympics, science festival, etc.) 1-2 ECTS
- For volunteering organized by student organizations, ministries or charity organizations 1-2 ECTS
- For volunteering in the institution under the jurisdiction of ministry for education, science, health, culture, social work, etc. 1 ECTS
- Other activities defined by the faculties' acts.





### 3.1.3 Organizational units dealing with social engagement

<u>Center for Career Development and Student Counseling</u> of the University of Kragujevac was established in 2007 with the aim of providing students and graduates with adequate information, counseling, trainings and support in realizing their career plans.

The work of the Center is focused on developing student services through various programs that provide support to students and graduates of the University of Kragujevac in career development and helps them to present themselves in the business world and/or to continue their education in the country or abroad. In this sense, they education young people on how to lead the conversation with employers, how to write professional biography and motivational letter, etc.

They also organize the set of practical placement programs in order to establish the link between students and companies and in this way influence the employability opportunities in the local community.

<u>Creativity Centre</u> of the University of Kragujevac was established in March 2017 within the IF4TM project. The mission of the Centre is to contribute to the development of creativity and entrepreneurial skills of students, researchers and pupils, development of ideas and innovations, to support the Centre users in launching their own businesses through establishment of start-ups and spin-off companies in order to commercialize their research results.

The Centre activities include:

- Develop creative thinking and entrepreneurial spirit in young people
- To support students and researchers in development of business and research ideas
- Boost socially responsible and entrepreneurial engagement within the academic sector
- Provide collaborative and multidisciplinary environment for team work of students, researchers and pupils in development of their ideas, also through the access to modern equipment for validation of ideas and development of prototypes
- Organization of volunteering opportunities
- Contribute to the employability of students.

One workshop was organized in the Centre for students and pupils on the creative thinking on a lot of ideas and potential innovation. The aim of the workshop was to provide students with new knowledge and skills in applying creative techniques in an innovative process of developing new products and services for the needs of the market and companies through practical exercises and team work.

# 3.1.4 **Programs for development of social engagement dimension at** universities

University of Kragujevac continuously participates in the various social events. Some of them are:

- Within the engaged research
  - Collaborative development projects
  - Joint projects



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- Services for enterprises
- Promotion of university
  - o Researchers' night
  - Open door days
  - o Start-up weekend
  - Competition for best student idea
- Engaged continuous education
  - o Development of flexible study programmes
- Social events
  - Exhibitions,
  - o Concerts
  - Literary events
  - Sports events
  - o Blood donation
  - o Charity work
  - o Volunteering

By defining of the list of specific measures and activities within the Individual social engagement plan for University of Kragujevac within the IF4TM project and adopting the Act on extracurricular activities of students, it is expected that the number of activities and participants in SE activities will be increased in the following period.

The **Catalogue of the research and innovation potential** (in both <u>printed</u> and <u>online</u> version) is the tool for promotion of universities resources with the ultimate goal to make this potential visible to potential users (companies, industry, health sector and other stakeholder) and in such a way meet their demands for resources, services and expertise necessary for raising their competitiveness and innovative at the global market.

The catalogue was developed within the Tempus project <u>WBCInno</u>, but was continuously updated throughout the IF4TM project implementation period with new units, centers and research groups.

The Catalogue is a unique tool to present and open to public the research and innovation potential of the University of Kragujevac. It gives the presentation of structures and resources of the University that support the knowledge transfer, research and innovation, such as laboratories, institutes, centers and the description of their activities, resources, projects, prototypes and other results that have innovative potential.

Online Catalogue besides the list of the research entities, provides a preview of researchers, equipment, projects, as well as offers for business partners (developed technologies, patent, licenses, training, specific expertise, methodologies, laboratory tests, etc.).

During the IF4TM project, this Catalogue has been updated with additional centers and laboratories, which makes the continuation of University's efforts to improve and maintain the promotion of university resources in order to initiate the cooperation with external partners.

One aspect of the social engagement targets the pupils of the secondary school. At the Faculty of Engineering, there is a course that is traditionally organized for pupils primarily of grammar school. It is the course for 3D modelling and introduction to PLM software (Dassault Systems – CATIA, Autodesk – Inventor, Siemens – NX).





Further, the **cooperation with industry** and business partners present the significant part of the social engagement of the University. Faculties of the University have long experience of this kind of cooperation which has been intensified within the IF4TM project.

During the IF4TM project, there have been several examples of this cooperation (some selected are listed here):

- Prizma (Rapid prototyping of components for new design of inhalator using 3D printer Alaris 30 and PolyJet RP technology)
- Belit, Belgrade (Application of RP technique for rapid tooling for copolymer casting of two/component plastics)
- Nissal, Nis (Numerical modelling and simulation of industrial process extrusion of Al profile through porthole-die)
- Slododa, Cacak (Numerical FE analysis of multistage metal forming process combined FE stress analysis of tools and workpiece)
- Orion, Kragujevac (Re-engineering of bending technology for elimination of springback effects)

Additionally, there has been a tendency to maintain high involvement of students and staff in various charity events. The participation in this kind of activities (as part of volunteering) is traditional and the awareness about it has been raised through the IF4TM and evaluation of such engagement has been institutionally recognized with the Act on evaluation of extracurricular activities of the students of University of Kragujevac.

One of the most recent activities is the charity event organized by the students of Faculty of Economics in cooperation with the Club for accounting and finances "Aktiva". They organized the charity fund-raiser to collect the money for the most vulnerable families and to make their New Year and Christmas holidays merrier and more peaceful.

Thirty-five families received the gift packages with the basic life supplies and sanitary products.

Besides the students from the Faculty of Economy, the students from Faculty of Law, Faculty of Sciences and Faculty of Engineering, student dormitory, organization "Bunt".

The action is traditionally organized in cooperation with the Social work center.

# 3.1.5 Monitoring

The monitoring of these activities are partially conducted through the Center for Career Development and Student Counseling, that keeps the record on the number of students engaged in some of the activities within the social engagement. Also, one part is conducted through the Committee for Quality Control of the University of Kragujevac.

# 3.2 University of Belgrade (UBG)

# 3.2.1 Institutional policy

# Valorizing extracurricular activities

University of Belgrade has a good practice of valorizing extracurricular activities of the students, thus promoting and motivating students' social engagement, by awarding additional ECTS credits to their academic records. The activities encouraged and recognized by UBG





are: engagement in official bodies of University/Faculty; participating in various forms of scientific and professional activities of University/Faculty; Internships; Volunteering in local communities; Competing in sports; Taking parts in local and international competitions; Taking part in organizing various University events, eg. summerschools, workshops, conferences; Assisting students with disabilities, etc.

### Providing equal opportunities

University of Belgrade is highly dedicated to supporting vulnerable groups and providing equal opportunities for all seeking higher education.

This is particularly practiced through its "Equal access to higher education" campaign and Short-term Strategy for better support and aid for the students, as well as a specialized funds and units dedicated to supporting vulnerable groups and students with disabilities.

### 3.2.2 Legal framework

Rulebook on valorisation of extracurricular activities of students

### Source: <u>http://www.bg.ac.rs/sr/univerzitet/univ-propisi.php</u>

#### 3.2.3 Organizational units dealing with social engagement

In order to create a professional university service to support students and recent graduates in developing practical knowledge and skills, or continuing education upon graduation and to connect them to the business community, the Foundation of Crown Prince Alexander for Culture and Education in cooperation with the University of Belgrade and the University of Nottingham has initiated the establishment of the **Centre for Career Development**.

The Centre has been officially founded by the University of Belgrade on the 5th December 2006 as a member of the University of Belgrade and it has its door opened for students at the premises of the Rectorate of the University of Belgrade daily from 10 a.m. until 1 p.m. and from 2 p.m. until 4 p.m.

The major goal of the Centre is to create a connection between the employers and the recently graduated students, to develop the awareness among students about the moderndays requirements. Student need to develop practical skills and increase capabilities in order to be prepared for the rapidly changing labour market. Employers want more than Faculty diplomas. The Centre is here to assist students to develop skills and knowledge relevant for employment, to gain work experience during the studies, to learn about the business world and its rules, as well as to think about options in a constructive way, in order to be prepared for the next step, after graduation. The Centre promotes students and graduates of Belgrade University as future experts in different areas of business and promotes the University of Belgrade as a leading institution of higher education in the region.

Activities of the Centre:

- working on development of student's capabilities, knowledge and practical skills relevant for employment;
- providing information for students on various opportunities: additional education, scholarships in the country and abroad, vacancies;
- connecting students and employers through internship programmes and trainings in the leading companies and organizations in the country;



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- · organizing presentations of the companies, and of their business ethics and policy;
- providing counselling services for students with dilemmas about their career choice or positioning on the labour market upon graduation;
- other activities of student counselling regarding career development such as organizing seminars and workshops on job search techniques, writing good CVs and cover letters, preparation for job interview, etc.;
- coordinating work of the existing Career Centres at faculty level;
- Following-up strategic goals in the area of employment in cooperation with the Centre for Strategic Management and Planning;
- Cooperating with other University Centres.

# Sources:

# <u>http://www.razvojkarijere.bg.ac.rs/</u>

**Center for cooperation with industry at the University of Belgrade** has the aim to establish links with local industry through proactive approach to promotion of university and faculty to the industry, provision of the opportunities for practical placements for students, mentoring programs, employment programs, etc.

### Source: http://csp.ekof.bg.ac.rs/

The University **Centre for Students with Disabilities** was opened on 20 March 2008. The centre was the first such centre in the region and the University of Belgrade showed that it is one of the leaders in the field of improving the position of the disabled students in Serbia. The main goal of the Centre is to provide support to the disabled students so that they can have equal opportunities for a quality higher education, which refers to:

- The development and improvement of the conditions for studying for the students with disabilities;
- Providing support for reading, scanning and transforming the textbooks into audio and electronic format for students with disabilities;
- Providing support for the translation into the gesture language;
- Providing information for students with disabilities on the conditions for studying and ways of support at the faculties, helping them when choosing a future faculty, providing them information on the possibility of prospective employment upon the graduation;
- Organising seminars, public panels and media coverage in order to motivate students with disabilities to enrol in faculties, as well as to raise the public awareness in Serbia of issues regarding the students with disabilities;
- Cooperating with the relevant institutions so as to make the position of the disabled students better.

The University of Belgrade will continue to develop the Centre, together with all relevant institutions, with the aim to improve the quality of the Centre to the level of the similar world centres. It is believed that this is one of the key steps for a significant improvement of the position of the disabled students and at UBG they hope that other Serbian universities will focus on the same issue.





Source: http://www.bg.ac.rs/sr/clanice/centri/csh/CSH.php

The Institute for Philosophy and Social Theory (IFDT), within the University of Belgrade, is engaged in the systematic and long-term research within the fields of philosophy and social theory. IFDT is conceived as a unique place open for multidisciplinary research and cooperation between academic organizations, public institutions, activist groups and the media, in order to enable productive reflection of the phenomenon of social (as well as political and civic) engagement.

The Group for Social Engagement Studies operates within the Institute. The Group combines theoretical and empirical research, as well as consultative activities, realized by the community of philosophers, sociologists, anthropologists, political scientists, historians, etc. The main idea behind the Group is the productive reflection on the civic, public and social forms of engagement that draws upon the vision which animated the founding act of the Institute for Philosophy and Social Theory itself in 1992.

The Group is conceived as a broad network open for active partnership with other scientific research organizations, public institutions, activist groups and media. This aspect is crucial for the versatility of critical examination of the existing social practices and for the efficiency of alternative polices, designed in common projects.

#### Source: http://www.instifdt.bg.ac.rs/en/

**UBG Creativity center** can also widely contribute to the development of universities, especially students, into socially responsible community. By capacitating students for creative thinking and with skills for entrepreneurial ventures, the centers raises employability rate in the region gravitating around university.

Also, the students engaged in Creativity Centers are responsible for outreach activities, such as promotion of science among secondary and primary school pupils, encouraging creativity and entrepreneurship, organization of workshops.

Bearing in mind the broad meaning of creativity, the scope of creative practices and multidimensionality of the third mission of the university have been resolved, it is clear that the Center could encompass a very wide range of activities. Among them stand out:

- Learning creativity;
- Creative workshops;
- Generating ideas;
- Meetings and team work;
- Creative support;
- Innovation activities;
- Entrepreneurship and networking;
- Staff training;
- Shared office space services;
- Exhibitions;
- Competitions; etc.

However, given the priorities, complementarity with the existing capacities existing within the UB (eg, UB Career Center, UB Technology Transfer Center, UB Center for Cooperation with Industry, etc.) and resource constraints; as well as on the existing offer in the territory of





Belgrade (eg, shared office space, conference rooms, etc.), as the most important functions of the Center we highlight:

1. Facilities (space and equipment) for the implementation of the concept "from idea to market";

- 2. Conducting lectures, trainings and workshops;
- 3. Organizing competitions and events for networking, presenting ideas and fundraising.

# 3.2.4 Programs for development of social engagement dimension at universities

#### Engaging in the cultural development of local society

University of Belgrade takes a very active part in the cultural development of the local society, which is the practice that should be kept at the same level in the following period.

The **University Library** as a member of University organizes significant number of culture events such as:

- exhibitions,
- concerts
- literary events
- and many others.

#### Events

Apart from the cultural events, the University participates in many other manifestations, charity and volunteering events, trying to include as many students as possible:

**Sports events** – the University of Belgrade has organized and participated in numerous sports events, and it will host the European University Games in 2020, with expected participation of about 5000 students.

**Blood donation** – Students actively participate in the actions of the Red Cross Belgrade for blood donations.

**Floods** – students of the University of Belgrade were active volunteering during the floods in Serbia in 2014.

**Foundations and Endowments** - There is a long tradition of endowing properties and funds in Serbia. Since 1997, consistent with the current norms and regulations, the University has restored the work of 11 endowments and 3 funds and is still making effort to reclaim them.

The following **endowments** and **funds** resumed their work:

- Foundation of Rada i Milan Vukićevića
- Foundation of Vlajko Kalenić
- Foundation of Milivoja Jovanovića i Luke Ćelovića
- Foundation of LJubice M. Zdravković
- Foundation of Dragoljuba Marinkovića
- Fondacija Milana Stefanovića Smederevca i supruge Darinke
- Foundation of Đoke Vlajkovića
- Foundation of Svetozara Vidakovića i žene Magdalene
- Fondacija Olge i Miodraga L. Panića



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- Foundation of "Luke Ćelovića Trebinjca"
- Foundation of Gliše i Marije Rakić iz Zemuna
- Foundation of Gašić dr Živana
- Foundation Koste Migrića
- Foundation "Potporučnik Borko Nikitović"
- Foundation of Veselina Lučića
- Fondacija "Mr ph LJubice Vojteh Dragićević i ing.oecc Nikole Dragićević"
- Fondacija "Novi dobrotvori Univerziteta u Beogradu"
- Fondacija "Sestre Bulajić"
- Foundation of "Gordana Jokić Kašiković i Dragiša Kašiković"

The tradition of endowing properties and funds has been carried on and the University constituted a few more funds for awarding scholarships. These are: the Fund of Sister Bulajić, the Funds of Ljubica Vojteh Dragićević and Nikola Dragićević, the Legacy of Danica and Ivan Feofilaktov, and the Legacy of Kosta Migrić to the University of Belgrade.

At a conference held on June 12, 1996, the University Council issued a Resolution on establishing the Foundation for improving the young university scholars' housing conditions, for the sake of better living and working conditions and adequate engagement in scientific and teaching activities (http://unifondzastanove.bg.ac.rs/eng.\_temp.html).

### 3.2.5 Monitoring

The Center for Quality Assurance is the organizational unit of the University of Belgrade, established to provide quality assurance systems at the University and faculties in its composition, with no legal personality, which, together with the Committee for Security and Quality Improvement, constitutes a unique institutional system for quality assurance of higher education at the University.

The processes are monitored in accordance with the UBG Rulebook on Standards and Procedures for Quality Assurance

#### Source: http://www.bg.ac.rs/sr/univerzitet/univ-propisi.php

#### 3.3 University of Novi Sad (UNS)

#### 3.3.1 Institutional policy

Social responsibility of the University is carried out through the following activities:

(1) Active and responsible research for the benefit of the wider community;

(2) Active and responsible education and / or training that will contribute to the development of the local environment, ie the region and

(3) Other activities related to directing the University to a wider community.

#### 3.3.2 Legal framework

At the University of Novi Sad within the IF4TM project, a social engagement Rulebook has been developed that can be found at the following web address:

http://www.if4tm.kg.ac.rs/pub/download/1513607708106\_PravilnikSocijalnaUkljucenostUNS-GSv01.pdf



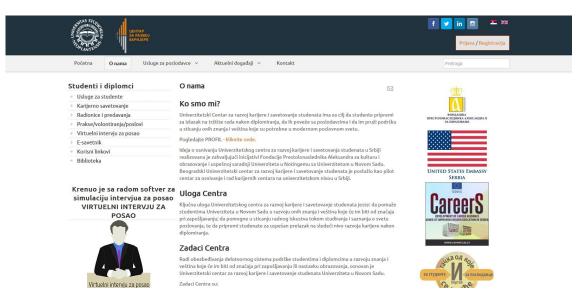


#### 3.3.3 Organizational units dealing with social engagement

In order to provide professional university services with an effective system of support for students and graduates in the development of knowledge and skills of importance in employment and further education, and for the purpose of strategic linking academic and business community in Novi Sad, Vojvodina and Serbia, the University of Novi Sad has founded the University Center for Career Development and Student Advice (hereinafter: Center) in May 2007. It's officially an office opened in October 2008.

The Center was established to contribute to the further positioning of the University of Novi Sad as a modern European one university and its faster and more efficient integration into the European Higher Education Area. Activity of the Center should replace the long-standing lack of cooperation between the University and the economy, especially in linking community through student work practices, and include the provision of career information services, career education and career counseling for students and graduates.

The Center aims to prepare students for entering the labor market after graduation, to associate them withemployers and to support them in acquiring those knowledge and skills that are needed in the modern business world.



The website of the Career Development Center and student counseling

# 3.3.4 **Programs for development of social engagement dimension at** universities

For many years now, the University of Novi Sad has been involved in the organization of events that are oriented towards the wider community, free of charge for all visitors, such as:

- Researcher's night
- Festival of Sciences
- Fair from Science to Industry
- Competition for the best student idea
- Best technological innovation
- Start-up weekend





- Open door days.

These events are visited every year by a large number of visitors aged 7-77 years.

#### 3.3.5 Monitoring

The monitoring of these activities are partially conducted through the Center for Career Development and Student Counseling, that keeps the record on the number of students engaged in some of the activities within the social engagement.

#### 3.4 University of Nis (UNI)

#### 3.4.1 Institutional policy

Nowadays, engaged universities are essential for economic and social future of each country. Thus HEIs should align their strengths into community contexts, engaging them in the cultural and economic development of their host societies. Having these in mind, the University of Nis created an <u>Individual Social Engagement Plan</u>, under the framework of IF4TM project, that defines the main tasks to be launched in order to further increase the social responsibility of the academic and non-academic staff of the University of Nis.

### 3.4.2 Legal framework

<u>By-law on minimal conditions on the promotion of the teaching staff on the University of Niš</u>, came into the force in December of 2015, and it introduced some aspect of valuation of the activities that staff conduct related to the Third Mission, more specific to the social engagement. That document introduced new criteria for the promotion of the lecturers at the University that candidates must meet, among others contribution to the professional, academic and general community. More specifically, the elements of the contribution to the academic and wider community are: supporting extra-curricular academic activities of students, participation in teaching activities that do not carry ESPB points, participation in the work of faculty and university bodies, managing the activities at faculty and university, contribution to activities that improve the reputation and status of faculties and universities, management in professional organizations, reviewing and evaluating papers and projects, organization of scientific conferences, organization artistic events (exhibitions, festivals, art competitions, etc.), participation in the work of committees, legislative bodies and the like, in accordance with the scientific and professional interpretation of faculties and universities, participation in important community bodies and professional organizations.

University of Niš enacted <u>by-law on valuation of students' extra-curricular activities</u> in 2015. This bylaw regulates the conditions and procedures for evaluating extracurricular activities of students of the University of Niš. Extra-curricular activities implies any relevant engagement of a student that is not envisaged by the study program, for which the student is awarded the appropriate number of ESPB points. Extra-curricular activities of students include: engagement in the work of bodies and bodies of the university, faculty and SKONUS; participation in various forms of teaching (as demonstrators); scientific and research work at the University and the Faculty; professional practice in institutions with which the University



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or faculties have concluded cooperation agreements; voluntary work in the local community; participation in national and international sports and cultural-artistic events; engagement in the organization of stands and meetings and public advocacy; participation in the organization and work of summer schools, workshops and conferences; charity work; engagement in the work of humanitarian organizations and associations of persons with special needs.

# 3.4.3 Organizational units dealing with social engagement

In the scope of IF4TM project, University of Niš established Creativity Center as a separate organizational unit, which includes a collaborative multidisciplinary space where students can develop creative thinking, entrepreneurial spirit and innovation in a relaxed and friendly atmosphere. The established Creativity Center plays an active role in modernizing the University from educational and scientific research into a socially active and responsible institution through the development of ideas, teamwork, networking and volunteer activities.

Centre for career development of University of Niš was established to support students of all levels in development of skills and abilities that are crucial for their employment, as well as to provide information on education and scholarship opportunities, both national and international. The Centre was opened in June 2008, with the help of Foundation of Crown Prince Alexander for Education and the University of Nottingham. The main role of the Centre is networking of the academic and business community and providing information and services in support of more efficient multi-sector cooperation. The Centre monitors and analyses the student admission and efficiency of studying, prepares informative publications, internet presentations and other forms of introducing the possibilities of studying at the University to the potential students, establishes contacts with relevant employment services, collects information on employment opportunities for students, creates unique database on University alumni employed in country or abroad, organizes meeting of students and potential employers.

Student support center has a role to provide support to disadvantaged students - students with health disabilities or social problems as well as to provide legal and other help to students in the case of any type of discrimination.

# 3.4.4 Programs for development of social engagement dimension at universities

University of Niš is permanently trying to develop long term partnerships with its neighborhood such as local schools, colleges, firms, NGOs, etc. At the same time the University of Niš is opening their facilities (in some time slots) such as libraries (both the University library "Nikola Tesla", as well as faculties' libraries), computer facilities, amphitheaters, etc. for interested parties from local or regional community. It should be noted that the University of Niš takes a very active part in the cultural development of the local society, which is the practice that should be kept at the same level in the following period. The University Library "Nikola Tesla" as a member of University organizes also significant number of culture events such as exhibitions, concerts, literary events and many others.





Some of the main events that are oriented towards the wider community are: Festival of sciences, Festival "Nauk nije bauk", The "Researchers' Night" in Niš, Competition for the best student idea, Info days, Week of students, etc.

### 3.4.5 Monitoring

The monitoring of these activities are conducted through organizing bodies that keeps the record on the number of students (for example Center for student support) or staff engaged in some of the activities within the social engagement.

# 3.5 State University of Novi Pazar (SUNP)

### 3.5.1 Institutional policy

Since establishment of State University of Novi Pazar acted as social responsible institution. During implementation of project. This is clearly stated as one of the main part of the mission and vision statement of University <u>http://np.ac.rs/yu/home-mainmenu-1/misija-i-cilj</u>. Further development of this aspect is supported by developing University developed <u>Individual Social Engagement Plan</u> during IF4TM project implementation. that defines the activities to be undertaken in terms engaged research, engaged education and other forms of social engagement of university, its staff and students.

### 3.5.2 Legal framework

The Sate University of Novi Pazar Act on the <u>criteria for professional advancement</u> regulates closely the procedure for employment of teachers and requirements and criteria for assessment of results of scientific and research work of the candidate.

Besides other requirements, the criteria for selection and appointment include the set of elective elements in article 7 such as professional development, contribution to the academic and wider community and cooperation with other higher education, research and cultural institutions.

#### 3.5.3 Organizational units dealing with social engagement

Career Center of SUNP was established in cooperation with USAID with aim to provide students and graduates with adequate information, counseling, trainings and support in realizing their career plans.

The work of the Center is focused on activities which can support students career development and helps them to present themselves in the business world and/or to continue their education in the country or abroad

Career Centre also organize volunteering activities and practical placement programs to establish the link between students and companies and in this way influence the employability opportunities in the local community.

Creativity Centre of the University of Kragujevac was established in February 2017 within the IF4TM project. The mission of the Centre is to contribute to the development of creativity and entrepreneurial skills of students, researchers and pupils, development of ideas and innovations, to support the Centre users in launching their own businesses through establishment of start-ups and spin-off companies in order to commercialize their research





results. Detailed roles and responsibilities of the center are defined in Statute of SUNP article 43.

Student parliament of the State University of Novi Pazar actively promote engagement of the students in all SE activities in the area. Besides active participation in all activities they regularly organize SE campaigns. Professors and staff of SUNP always take active participation in all of these SE related actions.

# 3.5.4 Programs for development of social engagement dimension at universities

State University of Novi Pazar continuously participates and organise various social events like: Collaborative development projects, Joint projects, Open door days, Competition for best student idea, Exhibitions, Concerts, Literary events, Sports events, Blood donation, Charity work, Volunteering.

By defining of the list of specific measures and activities within the Individual social engagement plan for SUNP within the IF4TM project we expect that the number of activities and participants in SE activities will be increased in the following period.

# 3.5.5 Monitoring

The monitoring of these activities are conducted through organizing body that keeps the record on the number of students or staff engaged in some of the activities within the social engagement.

# 3.6 Belgrade Metropolitan University (BMU)

# 3.6.1 Institutional policy

The <u>Statute of the Belgrade Metropolitan University</u> regulates the realization of Social Engagement with the purpose of professional development and education of individuals with the aim to facilitate their inclusion in the work process. Up to date info about events and opportunities:

- Bridging gap between science and business
- Inspiring youth to work in IT and high technologies
- Increasing competences
- Access to various domestic and foreign funds
- Individual and joint innovative projects
- Increasing sales
- Lobbing and branding

# 3.6.2 Legal framework

The Belgrade Metropolitan University developed <u>Rulebook on Social engagement</u>, under the IF4TM project, that defines the framework of the third mission of the University, in addition to education and research, the social inclusion and responsibility of the Belgrade Metropolitan University.

In the context of this Rulebook, the social responsibility of the University implies a two-way connection and impact on the wider social community and the environment in which employees of the Faculties of the University perform their activities.





The social responsibility of the University is carried out through the following activities:

- (1) Active and responsible research for the benefit of the wider community;
- (2) Active and responsible education and / or training that will contribute to the development of the local environment, more precisely, the region and
- (3) Other activities related to directing the University to a wider community.

# 3.6.3 Organizational units dealing with social engagement

**IT Innovation Center** Within the University, the Innovation Center operates in order to better apply the results of scientific research and development research, development of innovations, innovative products and work methodologies, as well as new technologies, based on the cooperation of the University, its teachers, associates, students and researchers and companies, on the one hand and other organizations operating within the Innovation Center, on the other. In order to provide spatial conditions for work, the Innovation Center may also use the premises of other legal entities with which the University has signed a cooperation agreement. The legal position, organization, method of operation and management of the Innovation Center shall be regulated by the founding act adopted by the President.

**Creative Center** Creative Center is an organizational unit that provides an incentive environment for the development of creative thinking among students, the development of new ideas, and above all the idea for new innovations that can become an incentive for the bearer of the idea to work on its realization within the framework of IT incubators or IT Innovation Center. Among them stand out: Learning creativity; Creative workshops; Generating ideas; Meetings and team work; Creative support; Innovation activities; Competitions; etc. The legal position, organization, method of work and management of the Creative Center shall be regulated by the founding act adopted by the President.

**NiCAT** Through the project ICT Cluster Academy, the companies for the first time actively participated in the preparation of the curriculum in order for the training to be completely harmonized with their real needs. By following the latest trends in education, we constantly improve the quality of the program. The lectures and meetings with high-school students, but also the promotion through media and social networks contributed to an increased interest in the technical faculties. On the other hand, the meetings with university students increased the interest in the companies from the Cluster. We continue to promote the IT and advanced technologies as the most promising fields of work

# 3.6.4 Programs for development of social engagement dimension at universities

Belgrade Metropolitan University continuously participates in the various social events, like: Researchers' night, Start-up weekend, Competition for best student idea, Fair from Science to Industry, Technological innovation, , Exhibitions, Concerts, Charity work, Volunteering, ect

# 3.6.5 Monitoring

Faculties, Centers and other units within the University work on the construction and development of institutional bases and support in the realization of social engagement at the University. The Quality Center defines the strategy and policy of monitoring, security, improvement and development of quality, and performs administrative and organizational tasks related to self-evaluation and raising the quality of study programs, teaching and





working conditions of the University and higher education units. The processes are monitored in accordance with the BMU Rulenook on Social Engagement.

### 3.7 Technical College of Applied Sciences (TCAS)

TCAS drafted a new rulebook to regulate this dimension of the third mission and it was offered to a special commission for reviewing TCAS regulatory documents for further improvement. Unfortunately, due to the internal reorganization it has not been adopted yet.



Coordinator: University of Kragujevac Jovana Cvijica bb 34000 Kragujevac, Serbia www.if4tm.kg.ac.rs



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