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IF4TM

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D2.6.1 Report on progress in TM implementation in Serbia in line with defined targets/goals and progress indicators in benchmarking report

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Abstract	D1.5 Benchmarking report gives a preview of benchmarking results analysed based on gathered information on EU (D1.1) and Serbian (D1.3, D1.4) legislative in the areas of knowledge transfer and innovations, continuing education and social engagement. The analysis is followed by the set of recommendations provided (D1.2).

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LIST OF ABBREVIATIONS

BMU	Belgrade Metropolitan University
CE	Continuous Education
CE	Continuous Education
CEO	Continuous Education Office
DUK	Danube University Krems
HEI	Higher Education Institution
IP	Intellectual Property
IST	Instituto Superior Tecnico
LLL	Life-long Learning
SE	Social Engagement
SE	Social Engagement
SUNP	State University of Novi Pazar
TCAS	Technical College of Applied Sciences
TTI	Technology Transfer and Innovation
TTI	Technology transfer and innovations
TTO	Technology Transfer Office
UBG	University of Belgrade
UKG	University of Kragujevac
UM	University of Maribor
UNI	University of Nis
UNIBA	University of Bari Aldo Moro
UNS	University of Novi Sad
UoB	University of Brighton

1 Implemented targets, specific goals and progress indicators

1.1 Implemented national targets and progress indicators

Table 1: Implemented targets and progress indicators at national level

Serbia			
Target 1: To support development of third mission in terms of legal framework			
Specific goals	**Description**	**Indicators**	**Description**
To incorporate the third mission of universities into relevant laws and strategies, new or updated	• New **Law on higher education** was adopted in September 2017. The new Law includes: – Better connectivity with preuniversity education, – Improvement of cooperation with business and industrial sector, – Strengthening innovative and entrepreneurial component of higher education, in order to make it relevant for the society at large and suitable for the labour market needs, – Protection of intellectual property in the technology transfer process, and – Academic integrity. • **Strategy on Scientific and Technology Development of the Republic of Serbia for the Period 2016 - 2020 – Research for Innovations** whose aim is to is to improve the efficiency and	• Number of new or updated laws, strategies and legal acts where TM is tackled • Number of action plans and actions related to TM • Number of articles defining TM dimensions	• Law on Higher Education • Strategy on Scientific and Technology Development of the Republic of Serbia for the Period 2016 - 2020 – Research for Innovations • Action Plan for the Strategy • National recommendations for universities and institutes in Serbia for intellectual property management in technology transfer activities • The Law on fund for science • 26 Articles of the Law on Higher Education that tacles the TM dimensions (3, 4, 5, 7, 11, 16, 12, 32, 34, 39, 43, 44, 49, 57, 58, 59, 60, 64, 80, 96, 102, 109, 111, 115, 116, 121) • 4 Measures of the Strategy (2.1, 2.2, 2.3, 2.6) • Measures in the Action Plan (1.2, 1.3, 1.4, 1.8, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 4.6, 5.2, 6.2 and 6.3)

	effectiveness of scientific and research system, support the development of new knowledge and technologies, creation of quality research staff in order to generate economic and social development, the Strategy provides six specific objectives and recommends the set of measures to achieve them • **National recommendations for universities and institutes in Serbia for intellectual property management in technology transfer activities** gives a preview of set of measures and actions, examples of good practice and exemplary model of documents and forms, within 18 recommendations for efficient intellectual management, especially for publically funded research. • **The Law on fund for science** was adopted in December 2018. This new law systematically regulates scientific and research activities, policies and measures for encouraging scientific and technological development. • **The Smart Specialization Strategy (RIS3).** The phases of the general framework of Smart Specialization Strategy implemented in		• Article 18 of the Law on Fund for Science gives the preview of the programs and each of them tackle the third mission element

	Serbia, as an associate member of the EU, are: • 1. Decision to launch a smart specialization process • 2. Analysis of strategic mandates • 3. Analysis of the existing economic, scientific and innovative potential (quantitative) • 4. Detailed analysis of priority domains (qualitative) • 5. The process of entrepreneurial discovery (partially implemented) • **The Strategy for Intellectual Property for period 2018-2022.** IP Strategy entered into force in October 2018. Te Strategy introduced indicators as the realistic estimated expected results that were set as objectives of the IF4TM project and which are also recommendaded at the Policy seminar that was held in April 2016.		
To initiate the development of Smart Specialization Strategy	• Research and Innovation Strategy for Smart Specialization (RIS3) was initiated. The aim of the RIS3 is to focus the development investment towards the areas where Serbia has a critical mass of knowledge, capacities and competences and where it has innovation potential	• Smart Specialization initiated • Smart Specialization Strategy developed	• Smart Specialization initiated • Smart Specialization Strategy developed

	to position on the global market. Draft Strategy is expected to be developed by the end of 2018		
To introduce performance indicators in national statistics requested by Ministry (limited number) to assess the progress of universities/faculties/institutes regarding the third mission activities	•	• List of Metrics for monitoring of TM implementation • Developed IT system for monitoring metrics and statistical processing	• Continuing Education (CE) indicators 1. Existence of Continuing Education in the university strategy and action plan 2. Number of CE programs as a percentage of the total number of study programs 3. Number of CE participants as a percentage of the total number of students 4. Quality Assurance for Continuing Education 5. Earnings from continuing education per total number teaching staff in FTE 6. Number of CE programs with external approval as a percentage of the total number of CE programs • Technology Transfer & Innovation (TTI) indicators 1. Income from licenses per researcher (full-time equivalent) 2. Number of patents per researcher (full-time equivalent)

			3. Number of technical solutions applied on national or international level, per researcher (full-time equivalent) 4. Number of joint publications with at least one coauthor from economy sector outside of HEI, per researcher (full-time equivalent) 5. Number of hours taught by external lecturers as a percentage of teaching hours in regular study programs 6. Final works, master works and doctoral thesis developed in cooperation with economy sector, per total number of students 7. Number of spin-offs established per researcher (full-time equivalent) 8. Earnings from contract research per researcher (full-time equivalent) 9. Number collaborative research agreements with companies where technology transfer is included per researcher (full-time equivalent) 10. Number of contracts for access to university

			space, facilities, equipment and services per researcher (full-time equivalent) 11. Revenue from TTI activities realized on the market, provided from non-academic partners per researcher (full-time equivalent) 12. Number of TTI events and competitions (not including knowledge competitions) • Social Engagement (SE) indicators 1. Mention of social engagement in the mission of university 2. Number of student volunteers in SE activities as a percentage of total number of students 3. Number of academic/administrative staff volunteers in SE activities as a percentage of total number of academic/administrative staff (full-time equivalent) 4. Impaired students as a percentage of the total number of students 5. Number of students who received some kind of

			institutional financial support as a percentage of total number of students 6. Number of an active Council of employers per number of faculties 7. Number of events open to community/public 8. Number of events (sports, culture, trainings, health, exibition…) organized by community using HEI facilities (free of charge or reduced charged) 9. Number of events in HE Institutions involving primary and secondary students
To recognize and formalize the work places in the Rectorates dealing with the third mission activities	• In the Law on Higher Education that was adopted in September 2017, the Article 69 regulates that the Republic of Serbia provides the funding for the employees engaged in the centers for technology transfer (technology transfer), and career development centers (continuing education and social engagement).	• Number of positions at Universities within TM units, formally recognized by Ministry	• Employees in Technology Transfer Centers • Employees in Centers for Career Development and Student Counseling
Target 2: To support the development of technology transfer dimension at Serbian Universities			
Specific goals	**Description**	**Indicators**	**Description**

To introduce KT and TM activities of university staff in criteria for their academic and scientific advancement	• At Serbian universities the criteria for academic and scientific advancement have already included some aspects of third mission. At some universities these criteria was updated and/or improved. • At the University of Belgrade, a new Bylaw on minimum conditions for obtaining an academic position was adopted in June 2016 and its addendum in September 2016 and correction in March 2017	• New or updated criteria for academic and scientific advancement	• Bylaw on minimum conditions for obtaining an academic position at the University of Belgrade • Addendum of the Bylaw • Correction of the Bylaw
To introduce incentives for IPR protection on international level where university/faculty/institute is patent applicant	• IPOS contribution in this category is expected	• Number of incentives measures • Number of granted patents on international level	•
To support the development of competitiveness and innovativeness of SMEs through better collaboration with universities (TM activity) and tax incentives systems	• SMEs are supported through the collaboration with faculties and its research centers, laboratories and research groups • The collaboration projects are presented in the document D5.5.1 Realized services for projects with enterprises	• Number of university-enterprises agreements for contract or collaborative research • Annual income from external collaboration	• 36 collaborations with SMEs reported by 6 Serbian HEIs
To legally regulate, allow and encourage the establishment of spin-offs at universities	• The new Law on the Higher Education adopted in September 2017 sets for the first time the legal ground for establishment of spin-offs	• Number of established spin-offs	•
To support National competition for best student	• MEST contribution in this category is expected	• NCBSI supported by Ministry as annual event	• 2017 (97 ideas, 350 students) • 2018 (54 ideas, 152 students)

idea by Ministry as annual event		• Number of students ideas collected • Number of students participated • Number of students' start-ups	• 2019 (61 ideas, 187 students)
Target 3: To support the development of continuous education dimension at Serbian universities			
Specific goals	**Description**	**Indicators**	**Description**
To adopt National Framework for Qualification	• The unique National Framework for Qualification is established for lifelong (CE) learning that includes all the levels and types of qualification, regardless of age and the form of their acquisition (through formal, non-formal and informal learning).	• NFC approved	• The Law on National Framework for Qualification adopted in April 2018
To establish national body (-ies) for certification of LLL programmes, their monitoring, and recognition of individual certificates	• **Office for Promotion of Education** participates in the preparation of legislation in the area of education within the jurisdiction of the Ministry for Education, Science and Technological Development, National Education Council, Council for professional education and education of adults • **National Academy of public administration** is central institution of the system of professional development in public administration with the status of the publically recognized organizer of the	• National body for LLL issues established and functional	• Office for Promotion of Education • National Academy of public administration • Health Council of Serbia

	activities of non-formal education of adults. • **Health Council of Serbia** is professional advisory body formed based on the Law on Health Care		
To define part time study concept and its recognition	• The part time study concept has been recognized and incorporated in the new Law on Higher Education in 2017	• Part time recognized by law	• Part time recognized by the Law on Higher Education (Article 34, 39, 116, 117, 118)
To invest more in capacity building of human resources	•	• Number of national programmes and incentives supporting CB of HR • National annual investments	•
Target 4: To support the development of social engagement dimension at Serbian universities			
Specific goals	**Description**	**Indicators**	**Description**
To develop mechanisms and incentives for better employment of young population in order to stop the brain drain and to engage young perspective researchers and graduates at well-paid positions at R&D and other institutions and local enterprise	• Competition for best student ideas support the employability of young people through building of their business skills and entrepreneurial spirit and support to establishment of start-ups • Establishment of spin-offs within the technology transfer dimension creates new job opportunities • Proof-of-Concept program provides the opportunity to commercialize the research and scientific results with the aim of	• Number of national programmes supporting young people and their creativity • Number of employed young people leaving in Serbia and supported by state incentives	• Competition for best student idea is included in the national Strategy of Scientific and Technological Development of the Republic of Serbia for the period from 2016 to 2020 – Research for Innovations • Establishment of spin-offs was legally regulated by the Law on Higher Education • Proof-of-Concept is included in the national Strategy of Scientific and Technological Development of the Republic of Serbia for the period from 2016 to 2020 – Research for Innovations

	clearing the way towards the establishment of spin-off and creation of better research environment		
To establish network of six Creativity centers in Serbia and to support their collaboration with other national and international institutions	Six Creativity Centers have been established at 6 higher education institutions : • University of Kragujevac • University of Belgrade • University of Novi Sad • University of Nis • University of Novi Pazar • Belgrade Metropolitan University Creativity Centers contribute to the development of creativity and entrepreneurial skills of students, researchers and pupils, development of ideas and innovations, support to their users in starting their own business, etc.	• Six Creativity centers established, equipped and functional • Collaboration, join actions and experience exchange among CCs supported within network • Number of joint actions with similar organizations	• 6 Creativity Centers established • 6 Creativity Centers equipped nad functional • 13 Promotional activities • 38 Trainings and Workshops • 9 Competitions • 5 Start-up • 8 Other events • 30 students volunteers engaged

1.2 Implemented HEIs targets and progress indicators

Table 2: Implemented targets and progress indicators (University of Kragujevac)

University of Kragujevac			
Target 1: To define TM as strategic mission			
Specific goals	**Description**	**Indicators**	**Description**

To change Statute with new mission and related provisions on TM dimensions	• The amended Statute was adopted by the Council of the University of Kragujevac, at the meeting held on April 3, 2018.	• The Statute changed and adopted by UKG Council	• The Statute adopted by the Council of the University of Kragujevac,
To define new criteria for scientific and academic advancements of university staff taking into account their TM activities	• New Criteria defined and adopted in 2018.	• New by-law approved and implemented at UKG and its Faculties	• New by-law adopted in 2018.
Target 2: To develop and strengthen technology transfer and innovation dimension			
Specific goals	**Description**	**Indicators**	**Description**
To develop IPR policy at the university level and set of documents related to the IPR management at the University	• The University of Kragujevac adopted two bylaws related to the management of intellectual property generated at the University and its member faculties: • **Bylaw on the IP management** regulates the intellectual property generated as the result of the scientific, research and art work at the University using the University resources. The Bylaw is accompanied with the relevant **forms for disclosure** of IP at the University (patent, industrial design, topography). • **Bylaw on the procedure for application for reviewers and procedure of reviewing intellectual property** regulates the terms and conditions for the activities related to the reviewing, reviewers' appointment, reviewers' rights	• By-law on IPR management • Form for invent disclosure • Form on the share in IP creation • Report form on technology evaluation • Guide for selection and application of contract model • Non-disclosure agreement (one side) • Confidentiality agreement (one side) • Confidentiality agreement (both sides) • Contract on technology and material assessment • R&D cooperation agreement • Licensing agreement • Information exchange agreement	• Bylaw on the IP management was adopted by the University's Council at the meeting held at June 28, 2017. • Forms for disclosure of IP were developed for patent, industrial design and topography and published at the website of the Technology Transfer Center (TTC). • Models of forms on the share in IP creation are provided at the TTC website • Guide for selection and application of contract model is provided at the TTC website. • Models of non-disclosure agreements are provided at the TTC website • Models of confidentiality agreements (both one side and both sides) are provided at the TTC website.

	and obligations at the University and its member faculties.	• etc.	
To strengthen KT and TM units at university	• JJ description	• Number of employees in KT and TM units • Number of capacity building programmes • Number of practical exercises in patenting technology or its licensing	• JJ indicators
To introduce the efficiency indicators for different activities of knowledge and technology transfer as well as the procedure for collecting and assessing the information	•	• Metrics for technology transfer developed and implemented in new IT system on the level of UKG and Faculties	•
By-law and procedure for realization of contract and collaborative research	•	• By-law on contract and collaborative research developed	•
To develop and deliver trainings on IPR, creativity, innovation for university staff and students	• University of Kragujevac organized the **training on IP management** for university staff and students. The training was organized on June 2, 2017. The trainees had an opportunity to learn more about the general aspects of intellectual property in order to understand its importance. • Two **trainings on market strategy** were organized at the University (May 26, 2017 and May 23, 2018) for university staff and students. The training covered the topics of marketing	• Number of certified trainings • Number of trainees	• One training on IPR management (16 trainees) • Two trainings on market strategy (25 trainees) • Two start up trainings (55 trainees) • One workshop “Methodology for innovation management” (25 trainees) • Workshop "With creative thinking on a lot of ideas and potential innovation" (19 trainees)

	concept and creating the value for consumers, market environment and strategy, as well as management of market and offer (instruments for marketing mix). • Two rounds of **start-up trainings** were organized for university students who participated in the Competition for best student ideas. The training had four modules: Business model development, Business model validation, Finance for start-ups and Elevator pitch • Workshop "**Methodology for innovation management**" was organized for university staff and students on March 9 and 10, 2017. The first day of workshop was dedicated to the basic principles of innovations, their definition, innovation cycle and financing of the innovation and research, new amendments of the Law on Higher Education. The second days was dedicated to the crowdfunding, IPR protection principles, establishment of the University Innovation Platform in Serbia, and presentation of EU partners' experiences. • Workshop "**With creative thinking on a lot of ideas and potential innovation**" was held		

	in the Creativity center of the University of Kragujevac (November 13, 2018). 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.		
Target 3: To develop and strengthen continuous education dimension			
Specific goals	**Description**	**Indicators**	**Description**
To develop integrative approach and centralized system for defragmented LLL concept at UKG	The D4.1 Guidelines for establishment of integrative approach in continuing education at the level of university was developed to be implemented at the University. The Guidelines include: • Procedure for development and approval of CE programs • Procedures for quality control and assessment of realized CE programs • Procedures for issuing certificates • Procedures for monitoring of integrative approach in realization of CE programs. The procedures are accompanied by the appropriate model forms.	• Centralized system and approach developed	D4.1 Guidelines for establishment of integrative approach in continuing education at the level of university developed
To map and promote LLL programmes at all 12 faculties at UKG	• LLL programs mapped at 12 members faculties of the University of Kragujevac. Eleven	• LLL programmes mapped and visible for end user	• The mapping report with the list of available programs (37) is

	questionnaires from management representatives and 375 questionnaires from professors and researchers were collected, and based on the assessed information, the results were presented in the document Report on mapping of CE activities – UKG • 36 programs for 2015/2016 were mapped • 37 programs available at the time of the mapping	inside and outside university	published and publically available at the project website
To present LLL programmes within Catalogue of BSOKG	•	• On-line catalogue updated with new LLL programmes	• JJ Number of trainings
To develop the action plan for implementation of the Strategy for Lifelong Learning	•	• Action plan defining who/what/when developed	•
Target 4: To develop and strengthen social engagement dimension			
Specific objectives	**Description**	**Indicators**	**Description**
To develop the social engagement plan	• University of Kragujevac developed the Individual Social Engagement Plan that defines the scope and list of activities carried out at the University that will transform it into socially responsible institution. The social engagement of the University is categories into engaged research, engaged education, promotional of research and science and participation in the social events.	• Social engagement plan developed and adopted by April 2017	• Social engagement plan for University of Kragujevac developed in December 2016

To support voluntarism by students and young researchers	• In order to support and boost volunteering at the University, D5.4 Document on social engagement of members of academic and scientific community was developed. The Document defines the volunteering, provides the set of recommendations for its realization and the measures for motivating the volunteering at the University. • The volunteering activities are presented in the report D5.4.1 Realized volunteering activities of students and staff at HEIs • Act on the evaluation of the extracurricular activities of students of the University of Kragujevac was developed and adopted. The Act defines the scope of volunteering activities, types and the number of ECTS credits assigned.	• Number of volunteers • Number of actions organized on voluntary bases	• 178 students volunteered • 97 volunteering opportunities for students • 4 volunteering opportunities for staff • 2 members of staff volunteered
To support students and pupils in creative and entrepreneurial activities within Creativity center	• Workshop "**With creative thinking on a lot of ideas and potential innovation**" was held in the Creativity center of the University of Kragujevac (November 13, 2018). 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	• Number of students engaged in Creativity center activities • Number of pupils visited CC and involved in hands-on exercises/workshops • Number of students/pupils participated at Competition for best student idea	• 1 student engaged in Center activities • 83 students participated • 7 student volunteers engageged in Creativity Center activities

	needs of the market and companies through practical exercises and team work. • The Creativity Centre is equipped with presentational equipment and material, equipment for prototyping (3D printers), 3D scanning in order to support the development of their ideas • The Competition for best student ideas will be organized by the Creativity Centre. Through the competition students have opportunity to build their entrepreneurial and creative skills and competences.		
To increase the participation of relevant stakeholders in the management structures, development and implementation of curriculum	• There are curricula that include stakeholders in their development and implementation, such as • In some study programs, practical placements are included as mandatory. Practical placements are realized by default outside the university at the premises of business partners and other relevant stakeholders (TRZ - Kragujevac, „Zastava oružje“, „Kompanija Sloboda“, TRZ - Čačak, HK „Krušik”, „Prvi partizan“, „Milan Blagojević“ - Lučani, „Prva iskra“ and many others).	• Number of stakeholders in management structures • Number of stakeholders engaged in development and implementation of curriculum	• Although stakeholders are indeed engaged in the development and implementation of curricula, there is no record on the exact number of stakeholders at each of 12 faculties • XX Members of University and faculties Councils appointed by the Government of RS
To develop the procedure for engagement of industry	• Establishment of the Council of Employers is obligatory at each	• Decision on engagement of industry representatives in	• Incorporated in amendments of the Statute of each faculty

representatives in the development and implementation of study programmes	faculty of UKG until March 2019, based on new amendments of the Law on Higher Education adopted in Septemder 2018	the development and implementation of study programmes	
To develop the centralized system for monitoring there SE activities	•	• Recommendations for establishment of centralized system for SE monitoring • List of metrics to be used	•

Table 3: Implemented targets and progress indicators (University of Belgrade)

University of Belgrade			
Target 1: To define TM as strategic mission			
Specific goals	**Description**	**Indicators**	**Description**
To include TM dimension in the Statute of UBG	•	• The Statute amended and adopted by UBG Council	•
Target 2: To develop and strengthen technology transfer and innovation			
Specific goals	**Description**	**Indicators**	**Description**
Provide stronger support to University units dealing with TT and innovation support	•	• TT capacities strengthened • Number of patents registered by UBG or its faculty • Number of licensing contracts	•
Introduce efficiency indicators for different TT activities	•	• Developed metrics for TT activities and applied on University level	•

Establish a central information system to collect information on TT activities in UBG member institutions (faculties, institutes and centres)	•	• Information system developed and information of TT activities and results collected and integrated	•
Target 3: To develop and strengthen continuous education dimension			
Specific goals	**Description**	**Indicators**	**Description**
To develop the action plan for implementation of the Strategy for Lifelong Learning	•	• Action plan developed	•
Develop centralized IT system for collecting data about LLL progress from faculties and university units dealing with LLL	•	• Information system developed and information of LLL activities and results collected and integrated	•
Target 4: To develop and strengthen social engagement dimension			
Specific goals	**Description**	**Indicators**	**Description**
To develop social engagement policy, strategy and action plan at UBG	•	• SE policy developed and adopted by authorizing University bodies	•
To develop action plan and appropriate mechanisms for implementation SE plan	•	• SE Action plan developed	•
Define a position within the University management structure responsible for SE activities (eg. a Vice Rector for SE)	•	• Appointed person (Vice Rector or similar) responsible for SE aspect at UBG	•
To develop centralized system for monitoring SE activities, keep records, measure the impact and effects of SE actions	•	• Information system developed and information of SE activities and results collected and integrated	•

*Note: The proposed targets and indicators are provided as recommendations and need to be further evaluated, developed and validated with UB representatives

Table 4: Implemented targets and progress indicators (University of Novi Sad)

University of Novi Sad			
Target 1: To additionally extend technology transfer and innovation dimension			
Specific goals	**Description**	**Indicators**	**Description**
To incorporate this dimension into UNS Statute	• 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.	• No of articles in Statute and other legal documents which relate to technology transfer and innovation dimension • No of new established spin-off companies at UNS	• The Statute changed and adopted by UNS Council
To reach full functionality of the Center for Intellectual property was also established	• Center for Intellectual property at UNS was established	• No of submitted patents • No of granted patents • No of submitted other types of IPR	• Researchers from UNS submitted around 50 patent applications peer year • UNS develops very good collaboration with Intellectual property Office, Republic of Serbia
To have operational the Danube Center for Technology Transfer	• At the UNS, the Danube Center for Transfer Technology was established as organizational unit of the University of Novi Sad. The	• No of new contracts for cooperation between industrial sector and researchers from UNS	• This Center should be a bridge between UNS staff and industrial sectors

	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.	• No of joint participation in consortia for EU-funded projects • No of joint published papers with authors from academic (UNS) and industrial sector	• This Center has very good collaboration with Science and Technology Park at UNS • This Center has very good contacts with Novi Sad Business Incubators
To motive UNS staff and students to be engaged in TTI activities	• Organization of the Competition for Best Technological Innovation; • Organization of Competition for the best students' ideas; • Organization fair from Science to Industry; • Organization of Festival of science and education; • Organization of Researchers' night	• No of participants on competitions • No of attendees at promotional events • No of students who directly participate in TTI activities	• UNS is a pioneer in organization of competition events such as Competition for the best technological innovation • UNS is a leader in the whole region regarding the number of established spin-off and start-up companies by the UNS staff
To develop and deliver trainings on IPR, creativity, innovation for university staff and students	• Active participation in the Competition for Best Technological Innovation and Competition for the best students' ideas	• No of certified trainings • No of well-educated trainees • No of attendees at organized trainings	• UNS has extensive experience in professional training in business model creation for competitors at different events
Target 2: To develop and strengthen continuous education dimension			
Specific goals	**Description**	**Indicators**	**Description**
To develop centralized system for LLL concept at UNS	• The University Centre for Lifelong Learning was already established at UNS • The LLL at UNS is defined in the Rulebook for Life Long Learning	• No of faculties with LLL concept acquired • No of attendees at the LLL courses • No of certificates given	• Apart from LLL at the UNS level, each faculty also can right to develop on programmes for continuing education
To map and promote LLL programmes at all 14 faculties at UNS	• Each faculty has already developed a set of workshops, lectures, courses and other kinds	• Number of LLL programmes mapped and visible for end	• Faculties, institutes and Centers at UNS which organize lifelong learning courses and programs are obliged to

	of organized training, offered in a framework of lifelong learning (LLL)	user inside and outside university	ensure the availability of lifelong learning topics and programs for all categories of users, in a way that is acceptable to them and appropriate.
To present LLL programmes within the Catalogue of BSONS	• The UNS Research Potential Catalog has been presented at the Business Service Office	• No of new LLL programmes in on-line catalogue of research and Innovation potential of UNS	• The on-line catalogue presented at BSO should be updated regularly with new developed LLL programmes
To develop the action plan for implementation of the Strategy for Lifelong Learning	• 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.	• The percentage of realization of the Action plan defined for LLL	• All actors should be actively involved to implement the Action plan in full capacities.
Target 3: To develop and strengthen social engagement dimension			
Specific objectives	**Description**	**Indicators**	**Description**
To develop the social engagement plan at UNS	Social responsibility of the University is carried out through the following activities: • Active and responsible research for the benefit of the wider community; • Active and responsible education and / or training that will contribute to the development of the local environment • Other activities related to directing the University to a wider community	• Decision on Social engagement plan adopted • No of faculties which takas active participation in Social engagement	• At the University of Novi Sad within the IF4TM project, a social engagement Rulebook has been developed
To support voluntarism by students and young researchers	• At many faculties within the University, the practice students	• No of volunteers	• Awareness of necessity to participate in volunteering actions

	conduct in public companies is organized	• No of actions organized on voluntary bases	among the UNS staff and students should be increased
To support students in creative and entrepreneurial activities within Engineering creativity center of UNS	At the University of Novi Sad there are two centers where students can develop their creativity: • Engineering Creative Center established within the IF4TM project • IdeaLab	• No of students engaged in Engineering creativity center of UNS activities • No of students participated at Competition for best student idea	• Students have free access to equipment in the Engineering Creative center as well as IdeaLad with the prior announcement of their arrival • In the Competition for Best Student Idea, students taking part, go through a free set of training
To increase the participation of relevant stakeholders /industry representatives in improving curriculum	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, UNS has founded the University Center for Career Development and Student Advice	• No of curriculum/study programs in which creation stakeholders / industry representatives was involved	• New Law for higher education enables involvement of experts from industry to participate in teaching process. • In earlier period UNS has consulted experts from industry and CEO of many spin-offs how to improve curriculum for students in ICT domain • UNS has very good collaboration with Vojvodina ICT cluster
To develop the centralized system for monitoring SE activities	• There is currently no centralized system for monitoring SE activities at UNS, but each faculty is doing it individually	• List of metrics to be used • No of faculties participate in social engagement activies	• Software platform should be developed as a database of social engagement activities both UNS staff and students

Table 5: Implemented targets and progress indicators (University of Nis)

University of Nis			
Target 1: To develop and strengthen technology transfer and innovation dimension			
Specific goals	**Description**	**Indicators**	**Description**

To develop IPR policy at the university level and set of documents related to the IPR management at the University	• The Statute of the University of Niš was adopted in December 2017. One of its articles defines role of the University in IPR management. • The Statute also establishes new Innovation center as the main university unit responsible for TTI and IPR questions.	• Required forms, guides, reports and agreements	• The Statute defines university role in IPR management. Innovation Center, as newly founded main university unit for TTI dimension of TM developed all the necessary documents related to the IPR management at university level.
To strengthen KT and TM units at university	• The Statute of the University of Niš 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. • The Statute also establishes new Innovation center as the main university unit for TTI and regulates all the legal aspects of its foundation. Innovation center was founded and started to work on all aspects of knowledge and technology transfer at University of Nis. It already reached its full operating status http://www.icun.ni.ac.rs/index.php/sr/	• Number of employees in KT and TM units • Number of practical exercises in patenting technology or its licensing	• Innovation center employed 5 people in management and 26 researchers in three research offices. Center already works on several dozens of practical projects.
To introduce the efficiency indicators for different activities of knowledge and technology transfer as well as the procedure for	• University of Nis during the project realization made and adopted set of indicators related to different activities of knowledge and technology transfer.	• Metrics for technology transfer developed and implemented in new IT system on the level of UNI and Faculties	• Developed metrics for TTI was introduced to the newly founded Innovation center to implement it on its internal IT system.

collecting and assessing the information			
To develop and deliver trainings on IPR, creativity, innovation for university staff and students	• Two **trainings on market strategy** were organized at the University for university staff and students. The trainings covered the topics of marketing concept and creating the value for consumers, market environment and strategy, as well as management of market and offer (instruments for marketing mix). • Two rounds of **start-up trainings** were organized for university students who participated in the Competition for best student ideas. The training had four modules: Business model development, Business model validation, Finance for start-ups and Elevator pitch • University of Nis organized the **training on IP management** for university staff and students. The training was organized on May 11, 2017. The trainees had an opportunity to learn more about the general aspects of intellectual property in order to understand its importance. • 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	• Number of certified trainings. • Number of trainees.	• Two trainings on market strategy (19 trainees) • Two start up trainings (17 trainees) • One training on IPR management (27 trainees) • One workshop "Methodology for innovation management" (20 trainees) • Workshop "With creative thinking on a lot of ideas and potential innovation" (27 trainees)

	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. • Workshop "**With creative thinking on a lot of ideas and potential innovation**" was held in the Creativity center of the University of Nis (October 30, 2018). 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.		
Target 2: To develop and strengthen continuous education dimension			
Specific goals	**Description**	**Indicators**	**Description**
To develop centralized system for LLL concept at UNI	• The University Centre for Lifelong Learning is responsible for all LLL activities at University of Nis. The functioning of the Center is defined in Rulebook for Life Long Learning. • The D4.1 Guidelines for establishment of integrative approach in continuing education at the level of university was developed to be implemented at the University. The Guidelines include: Procedure for development and approval of CE programs, Procedures for quality control and assessment of realized	• Centralized system and approach developed	• University of Nis has Centre for Lifelong Learning which is responsible for all LLL activities at University of Nis. It operates under Rulebook for Life Long Learning and D4.1 Guidelines for establishment of integrative approach in continuing education at the level of university, developed during project realization. Roles and joint activities of different university/faculty units in integrative approach for

	CE programs, Procedures for issuing certificates, Procedures for monitoring of integrative approach in realization of CE programs. • Senate of University of Niš adopted the strategy on continuous training of researchers on 18.02.2019. 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.		continuing education are defined. CE unit coordination of continuing education activities with faculties and other university units is established.
To map and promote LLL programmes at all faculties at UNI	• LLL programs mapped at 6 members faculties of the University of Nis. Six questionnaires from management representatives and 84 questionnaires from professors and researchers were collected, and based on the assessed information, the results were presented in the document Report on mapping of CE activities – UNI • Each faculty has developed a list of workshops, lectures, courses and other kinds of organized training, offered in a framework of lifelong learning (LLL)	• LLL programmes mapped and visible for end user inside and outside university	• The mapping report with the list of available programs is published and publically available at the project website. • Faculties, institutes and Centers at UNI which organize lifelong learning courses and programs are obliged to ensure the availability of lifelong learning topics and programs for all categories of users.
To present LLL programmes within Catalogue	• Central Catalogue with LLL programmes has not been created at University of Niš	• On-line catalogue updated with new LLL programmes	• On-line catalogue Catalogue with LLL programmes has not been created at University of Niš
To develop the action plan for implementation of the Strategy for Lifelong Learning	• Action plan for implementation of the Strategy for Lifelong Learning has been developed at University of Niš	• Action plan defining who/what/when developed	• Action plan for implementation of the Strategy for Lifelong Learning has been developed at University of Niš with roles and deadlines defined.

			• Strategy on continuous training of researchers was adopted on at the Senate of UNI. This strategy also has action plan incorporated.
Target 3: To develop and strengthen social engagement dimension			
Specific goals	**Description**	**Indicators**	**Description**
To develop the social engagement plan	• University of Niš developed the Individual Social Engagement Plan that defines the scope and list of activities carried out at the University that will transform it into socially responsible institution. The social engagement of the University is reflected in engaged research and education, promotion of research and science as well as participation in the social events.	• Decision on Social engagement plan	• Social engagement plan for University of Niš was developed in January 2017.
To support voluntarism by students and young researchers	• University of Niš enacted bylaw on valuation of students' extra-curricular activities in 2016. This bylaw regulates the conditions and procedures for evaluating extracurricular activities of students of the University of Niš. Extra-curricular activities imply 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. Based on that regulatory document, University of Niš now organizes every year, in cooperation with city council, competition for voluntary practices "UNI praksa" where	• Number of volunteers • Number of actions organized on voluntary bases	• More than 30 volunteers every year in city public institutions (Health Center, Regional Development Agency, City municipality, Youth office, Cultural center). • More than 20 volunteers engaged in the work of bodies of the university and faculties; participation in various forms of teaching (as demonstrators); participation in the organization and work of summer schools, workshops and conferences.

	students can participate in the working practice program, one month long, without any fee, in city public institutions.		
To support students in creative and entrepreneurial activities within Creativity centre	• Workshop "With creative thinking on a lot of ideas and potential innovation" was held in the Creativity center of the University of Nis (October 30, 2018). 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. • The Creativity Centre is equipped with presentational equipment and material, equipment for prototyping (3D printers), 3D scanning in order to support the development of student ideas • The Competition for best student ideas is organized by the Creativity Centre together with adequate start-up trainings (Business model development, Business model validation, Finance for start-ups and Elevator pitch) for university students who participate in the Competition. Through the competition students have opportunity to build their entrepreneurial and creative skills and competences.	• Number of students engaged in Creativity center activities	• Several students engaged in Creativity center activities • More than 50 students participated in Competition for best student idea. • 27 students participated in center workshop

To increase the participation of relevant stakeholders/industry representatives in development and implementation of curriculum	• Development of study programs is performed at individual departments and faculties. Relevant stakeholders / industry representatives are included in development and implementation of almost all curricula recently accredited at University of Nis, especially in the field of techniques. In some study programs, student practices are included as mandatory. Practical placements are realized at the premises of business partners and other relevant stakeholders.	• Number of stakeholders engaged in development and implementation of curriculum	• Development and implementation of study programs is performed at individual departments and faculties, so, the university does not have the exact number.
To develop the centralized system for monitoring SE activities	• Centralized system for monitoring SE activities at UNI has not yet been developed. Instead, vice rector monitors SE activities on university and different faculties.	• List of metrics to be used	• List of metrics has been adopted during project realization. Vice rector is a person dedicated to monitor SE activities.

Table 6: Implemented targets and progress indicators (State University of Novi Pazar)

State University of Novi Pazar			
Target 1: To develop and strengthen technology transfer and innovation dimension			
Specific goals	**Description**	**Indicators**	**Description**
Establishment of creativity center	• SUNP officially established Creativity Centre by decision of SUNP council.	• Creativity centre will be established in the SUNP	• Official decision of establishment
To develop and deliver workshops on	SUNP during project implementation organised number of trainings for students.	• Number of workshops that will be delivered to pupils and students	• 15 Training and workshops were delivered.

entrepreneurship and creative thinking for pupils and students	• **Work Shop Methodology Guide for Innovation** was organised for students and staff on February 2017. • **Training for Business model development, Business model validation, Finance for start-ups and Elevator pitch** were organised on 2017, 2018 and 2019 as integral part of the Competition for best student idea. Trainings were opened for wider community participation. • **Two training on Market strategy** were held on SUNP in 2017 and 2018. • Creativity Center organised training for **Modelling resources of Creativity Centre** and introducing resources of centre to students in December of 2018. • **Training With creative thinking to a lot of ideas** and potential innovation, was held as two part training on April and May 2019. • Creative center organized Workshop **„Poslovi za 5“**. Workshop covered modern job opportunities in Public Relations, Human resources and Information technologies. Students have chance to hear how to emerge as PR manager for international company. Students had opportunity to hear first-hand experiences from managers of		

	international and national companies.		
To involve students and researchers in entrepreneurial and innovative activities within open-innovation campaigns in collaboration with enterprises	• Students of SUNP were active on Open Innovation Campaigns. • Modelling of the City Centre of Novi Pazar was delivered for Tourist organisation of Novi Pazar. • Five students from SUNP applied for Open Innovation Challenges and won two challenges.	• Active participation in open-innovation campaign, number of students, researchers and enterprises.	• One public enterprise was engaged in Open Innovation Campaign. • 13 students participated in campaigns.
To promote involvement in National competitions for (BSc, MSc, PhD) best ideas of students	• During implementation of Competition for best student idea SUNP organised 3 info days and promoted this activity to students.	• Number of project ideas submitted in national competitions	• 28 student ideas submitted
To establish sustainable collaboration with partner organizations (schools, City of Novi Pazar, Chamber of Commerce, Regional Development Agencies, etc.)	• One open innovation Campaign delivered with Public Company	• Number of joint activities with stakeholders.	• 1 solution provided for the Public Company
Target 2: To develop and strengthen continuous education dimension			
Specific goals	**Description**	**Indicators**	**Description**
To define LLL an CE in the strategic documents of SUNP	• Statute of SUNP clearly involved CE in mission and strategic documents of SUNP	• CE is included in the mission of the HEI. This indicator measures the extent of the HEI's institutional commitment towards CE on a long term basis • CE is included in the strategy of the HEI. This indicator measures the	• Officially adopted statute of SUNP

		extent of the HEI's institutional commitment towards CE on a long term basis. A strategy plan dedicated to CE with indicators reflects the fact that CE is taken into account on the HEI's administrative level and financial plans as well	
To develop regulations defining of new LLL programs and their quality control	• Rulebook for LLL in line with recommendations developed in IF4TM project and new legal regulative was adopted in May 2019	• Existence of the policy managing of defining new programmes for CE and LLL on university level	• Officially adopted rulebook
Establishing comprehensive and unified approach to CE on SUNP	• Rulebook for CE in line with recommendations developed in IF4TM project and new legal regulative was adopted in May 2019	• Existence of the policy managing of CE and LLL on university level	• Officially adopted rulebook
Development of comprehensive CE plans, programs and training modules	• During project implementation SUNP prepared and delivered 9 CE programes.	• Total number of CE programmes active in the year of reference	• 3 programes active
To include representatives of enterprises, in creation of CE courses. To continuously monitor the current status of job offers at the National office for employment and demands and needs of enterprises	• During project implementation there was no joint CE course developed.	• Total number of partnership CE programmes with public and private business designed and approved for implementation with any external partner	• N/A
Target 2: To develop and strengthen social engagement dimension			

Specific goals	Description	Indicators	Description
SE is included in the strategic and policy document	• Statute of SUNP clearly involved CE in mission and strategic documents of SUNP • SUNP developed individual SE plan on May of 2017.	• Clear inclusion of SE as integrative part of the strategic documents • Development of a policy plan for SE. • Existence of SE in the mission of HEI • This indicator evaluates the commitment of the HEI at the administration level and on a long term basis	• Officialz adopted Statute • SE plan
To increase the participation of relevant stakeholders in creation and implementation of curriculum, development and implementation of social engagement strategy/policy	• There is no SE programme developed with public and private business.	• Total number of partnership SE programmes with public and private business designed and approved for implementation with any external partner	•
To enhance the existing and introduce new activities that will contribute to the University's development into socially responsible institution at highest possible level	• Exhibition of the students of ART was opened to wider public • Action of Voluntary blood donation was organised in cooperation with red Cross • Poet night was organised as part of celebrating World days of Poetry	• Total number of SE activities in the year of reference	• 3 events during 2019
To Increase opening of university in form of events, research facilities toward community	• Exhibition of the students of ART was opened to wider public • Action of Voluntary blood donation was organised in cooperation with red Cross	• Number of events open to community/public. Events organized or delivered by the HEI free or charged which are open to the general public without	• 11 events • 1 PoC proposal • 2 facilities

	• Poet night was organised as part of celebrating World days of Poetry • Three open days were organised • Humanitarian street race. • Tournament in educational game "Monetura" • For all three local competition for best students idea support from local companies, self-government and regional agencies were established. Competitions were opened for public. • PoC project applied from SUNP was developed in cooperation with JP Parking servis to promote solution of parking problem in city	needing an invitation to attend e.g. concert art exhibition, lectures, open days • Number of research initiatives with direct impact on the community Research must be carried out with a stated benefit for the broader community whether it is collaborative research or HEI driven research • Number of facilities available free or reduced cost HEI facilities to communities	
To promote involvement of teaching, administrative staff and students in SE activities	• Promotion of SE activites was delivered on different levels SUNO students were sent for practical placement at public companies, organised Bazar of Humanity - creative workshops, supported Association for Support Mentally Challenged Persons and Centre for Asylum Seekers. • Staff took active role in development Strategic documents of City of Novi Pazar	• Number of academics involved in volunteering towards the community • Number of non-academics or technical or administrative staff involved in volunteering towards the community • Number of students involved in volunteering towards the community	• 10 number of academics involved in volunteering towards the community • 0 number of non-academics or technical or administrative staff involved in volunteering towards the community • 28 number of students involved in volunteering towards the community

To establish partnership SE activities and projects with public and private business	• There was not establishment of proposed activities. • During project Implementation University applied for IPA Cross Border project with High Schools and Regional Development Agency but did not received grant.	• Number of community based learning community modules offered by HEIs • Number of activities specifically targeting disadvantaged students / community • Amount of grants/donations/contracts arising from engaged partnerships	• N/A

Table 7: Implemented targets and progress indicators (Technical College of Applied Sciences Zrenjanin)

Technical college of applied sciences Zrenjanin			
Target 1: To develop and strengthen technology transfer and innovation dimension			
Specific goals	**Description**	**Indicators**	**Description**
To include the TT policy/strategy in the Statute of TCAS	•	• Amendments to the Statute of TCAS	•
To develop the TT policy/strategy	•	• The relevant document adopted	•
To establish Technology Transfer Office / Centre	•	• Decision on establishing TTO/TTC	•
To appoint the responsible person/s	•	• Decision on appointing the responsible person/s	•
To develop the action plan	•	• Adoption of the action plan	•
Target 2: To develop and strengthen continuous education dimension			

Specific goals	Description	Indicators	Description
To develop the LLL policy	•	• The relevant document adopted	•
To establish LLL Office/Centre	•	• Decision on establishing LLL Office/Centre	•
To develop LLL programmes, curricula and modules	•	• The relevant document adopted	•
To appoint the responsible person/s	•	• Decision on appointing the responsible person/s	•
To develop the action plan	•	• Adoption of the action plan	•
To develop courses and trainings and e-learning courses and trainings	•	• Curricula and syllabuses for LLL courses and trainings	•
Target 3: To develop and strengthen social engagement dimension			
Specific goals	**Description**	**Indicators**	**Description**
To include the SE policy in the Statute of TCAS	•	• Amendments to the Statute of TCAS	•
To develop the SE policy	•	• The relevant document adopted	•
To appoint SE commission (teachers and students) responsible for implementation of SE policy	•	• Decision on appointment of SE commission	•
To develop the general and annual action plan	•	• Adoption of the general and annual action plan	•

To engage more students in SE activities and support them to offer new ideas	•	• Number of students engaged in SE activities	•
To invite all possible stakeholders to participate in finding new forms of SE activities	•	• Number of stakeholders participating in activities	•

Table 8: Implemented targets and progress indicators (Belgrade Metropolitan University)

Belgrade Metropolitan University			
Target 1: To define TM as strategic mission			
Specific goals	**Description**	**Indicators**	**Description**
To change Statute with new mission and related provisions on TM dimensions	• Statute of Belgrade Metropolitan University and updated. In accordance to Changes of Law on Higher Education, Belgrade Metropolitan University adapted internal Rulebooks and legal documents. One of them was Statute.	• The Statute changed and adopted by BMU Council	• The Statute was changed and adopted in May 2017 • 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.
To define new criteria for scientific and academic advancements of university staff taking into account their TM activities	• Rules and Procedures Relating to the Terms and Confirmation of Appointment, Advancement and Promotion of Members of Academic Staff are modified in a	• New promotion rules are adopted and implemented	• All procedures regarding appointment, advancement and promotion are additionally specified and revised.

	way that are now more strict and demanding then suggested by National Council for Higher education through minimal qualifications.		
Target 2: To develop technology transfer and innovation dimension			
Specific goals	**Description**	**Indicators**	**Description**
To develop IPR policy at the university level and set of documents related to the IPR management at the University	• Rulebook on Intellectual property rights - 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.	• New internal IPR regulations adopted • Form on the share in IP creation • Report form on technology evaluation • Non-disclosure agreement • Confidentiality agreement • Licensing agreement	• Rulebook on Intellectual property rights adopted in December 2018.
To enable the spin-off of BMU *Innovative Software Technologies d.o.o*. to run commercial SW development projects	• Cooperation with Innovative Software Technologies where students are developing SW	• SW development contracts with clients • 5 scholarships to BMU students each year	• In 2017/2018 academic year Innovative Software technologies provided 9 scholarships for students that are developing software
Creation of the Creativity Centre in Nis	• In order to motivate development of creativity and entrepreneurial skills of students, staff and all stakeholders, development of ideas and innovation, Creativity centre was developed to support to their users in starting their own business, etc.	• The Creativity Centre opened	• Creativity Centre established and will be opened on 27th of February 2019

Creation of the IT Innovation Centre	• Establishment of an IT Innovation Centre within the Business and Educational Centre of the BMU campus in Niš should ensure partnerships with IT companies that are interested in joint development of innovations, but also academic cooperation (scholarships, loans or employment of students). The IT innovation centre should create conditions for supporting such form of cooperation with IT companies.	• The IT Innovation Centre opened	• The IT Innovation Centre is still under development
Creation of the IT Business Incubator	• Establishment of IT business incubator within the Business and Educational Centre of the BMU campus in Niš should develop its services for its users - primarily current and former UM students.	• The IT Business Incubator opened	• The IT Business Incubator opened is still under development
Target 3: To develop and strengthen continuous education dimension			
Specific goals	**Description**	**Indicators**	**Description**
Creation of new CE strategy	• 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.	• New CE strategy document adopted	•

	Upon the completion of the program, the University issues the certificate on the completed program and gained competences.		
BMU CE methodology, rules and procedures	• Rulebook on Life Long Learning 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.	• BMU CE methodology, rules and procedures adopted	• Rulebook on Life Long Learning was adopted in December 2018

Design and development of CE short cycle programmes and courses, according to new BMU methodology, rules and regulations	Different programmes have been developed according to the new methodology: • 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.	• Minimum one short cycle (SC) programme offered and 10 CE courses in 2017 • Min. two new SC programmes and 20 CE courses offered	• 4 Short cycle programmes realised (2072018) • 12 CE courses realized (2018/2019)
Promotion of new BMU short cycle programs and courses of CE programme (catalogue, brochures, internet marketing, special web side etc.)	• Continuous campaign during the year is active. BMU has Marketing and Design team that is actively promoting all new courses and providing participants with all necessary information. Center for Continuing Education "Pro Academy" is organizational unit of the University providing all services interested parties.	• Promotion campaign and new promotional materials and channels are available	• https://www.metropolitan.ac.rs/kursevi/
Target 4: To develop and strengthen social engagement dimension			
Specific goals	**Description**	**Indicators**	**Description**
To be a member of a cluster of IT companies	• BMU aims to become member of cluster of IT companies in order to improve communication between University and industry and	• Member of at least one IT cluster	• BMU become a member of NiCat ICT Cluster in Niš

	enhance social engagement dimension		
To establish communities with secondary schools and their teachers to realize collaboration projects	• BMU will establish strong connections with secondary schools since this is highly important to be in connection with future students	• A community created with secondary schools in NIs and its region	• BMU each year visit a great number of various secondary schools in whole Serbia • Additionally BMU organize internal competitions for pupils so the best one can earn scholarship for one of the study programmes BMU is offering

2 Conclusions

Three laws define the legal framework for higher education, scientific research and innovation development in Serbia: *Higher Education Act, Science and Research Activity Act* and *Innovation Activity Act*. They specify regulations and public funding programs of all three dimensions of universities:

- Education (1st Mission)
- Research (2nd Mission)
- Technology Transfer and Innovations, Continual Education, and Social Engagement (3rd Mission)

There is a set of laws related to IPR protection, but, we did not identify the need for any modification of these laws related to the 3rd mission.

Figure 4 shows the roles and public funding of education, research and 3rd mission by the Higher Education Act and Science and Research/Innovation Activity Acts. **Higher Education Act and Science and Technology Development Act** mainly support and fund 1st and 2nd missions of universities, HEIs and research institutes (basic and applied research ones), but may fund also some of activities of the 3rd mission, such as Continual Education (partially). **Innovation Activity Act** supports and specifies public funding of the 3rd mission of universities, HEIs, applied research institutes (ARIs) and (partially) companies, but through companies (micro/small/medium/large) that are project coordinators and grant holders, obliged to engage relevant HEIs and ARIs, with provided public funding of their activities.

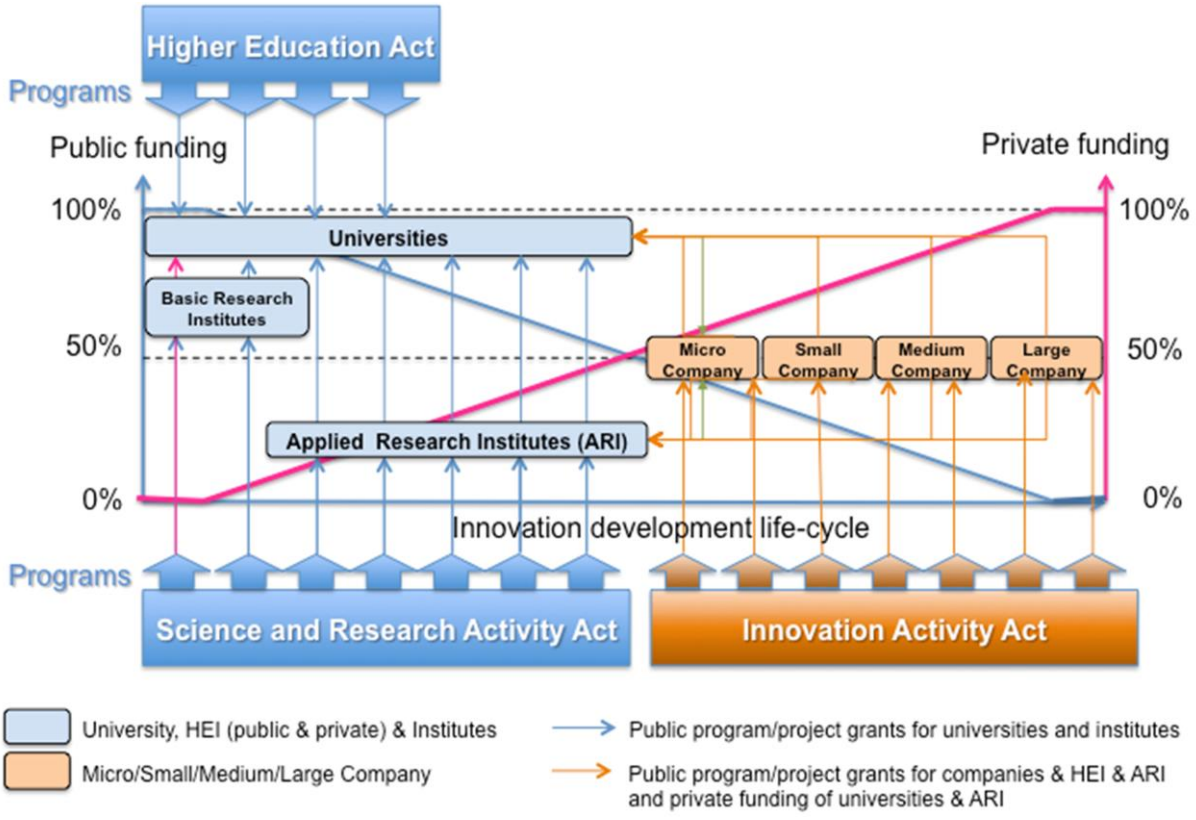

Figure 1 The roles and funding of all three missions of universities

As this document is aiming to specify recommendations for the 3rd mission of the university, only recommendations for this mission will be given.

2.1 Dimension 1: Technology transfer and innovations

Recommendations given in this section are only related to *technology transfer and development of innovations,* such as innovative products, services and processes.

2.1.1 National legislation related to the technology transfer and innovations

Regarding IPR legislation, there are no recommendations related to laws dealing with intellectual property rights, as these laws satisfy all aspects of legal IPR protection relevant to the 3rd mission.

Three sets of recommendations are specified for three relevant laws for Technology Transfer and Innovation Development, and, in general, for the 3rd mission of universities.

Higher Education Act:

1. Support of the Third Mission of universities:
    a. Building stronger commitment to Third Mission by explicitly including these activities into universities' mission statements, regulatory and strategic documents;
    b. Include Third Mission activities in promotion criteria of professors.
2. Strengthening of entrepreneurial component and innovative potential of higher education:
    a. Support the concept of "entrepreneurial university";
    b. Encourage market/entrepreneurial activities of HEIs;
    c. Educate students for the development of innovations and entrepreneurship;
    d. Research and innovation development need to be part of HE system by changing the organizational structures, funding models and incentives systems.
3. Improvement of cooperation with employers and industry:
    a. Allow experts from companies to be adjunct professors (without part-time employment, contract-based engagement);
    b. Support of innovation centers as organizational units of HEIs for realization of joint innovation projects with industrial partners;
    c. Form Employers Councils to analyze existing and approve new curricula;
    d. HEIs need to define rules, forms, mechanisms and procedures for development of university-industry cooperation;
    e. Encourage development of organizational units for dissemination of research results, patent management, and building ties with industrial and business partners such as TT (Technology Transfer) centers, IPR offices.
4. Improvement of cooperation with research institutes:
    a. Allow distinguished researchers to teach students as adjunct professors and mentors (without part-time employment, contract-based engagement);
    b. Develop and offer joint PhD study programs.
5. Financing of higher education:
    a. Implement scholarships (paid by public and/or private sources) that reflect the cost of education of student;
    b. If graduates educated by the state grant leave Serbia, they should pay back the costs of their education.

Science and Research Activity Act:

Science and Research Activity Act provides the legal framework for scientific research predominantly realized at HEI and research institutes, that supports initial phases of the innovation development process, such as basic and applied research, as well as development of technologies in different disciples, as foundation for programs provided by the Innovation Activity Act.

1. Support of the priority-driven applied research, as the basis for innovation development, by changing funding ratio Basic/Applied research to 1:2.
2. Support of commercialization of research results of technical HEIs and applied research institutes (ARI) through their collaboration with partner companies.
3. Provide tax incentives to organizations that are successful in international projects, invest in to R&D and innovations development, invest in education of their existing and future staff (student scholarships).
4. Reorganization of public research institutes - most of them should be applied research institutes with market-driven and need-driven research. Basic research institutes will work on contracted long-term research programs in line with national priorities providing the basis for future applied research.
5. Support increase of the number of researchers and innovation developers in HEIs, applied research institutes and companies.
6. Provide regular public investments into R&D infrastructure
7. Support applied research at colleges of applied sciences, if they satisfy specified conditions.
8. Instead of using the existing long-term and unique Technology Development Program, it is recommended to offer smaller and shorter specific programs designed for specific type of companies (micro/small/medium/large) in several priority application areas (Fig.4). Calls for proposals should be open every year.

Figure 5 shows programs groups that consists of one or more programs specifically designed for an industrial priority area and type of companies. In this way programs and their projects will be more in line with specifics of industrial priority areas and type of companies. As a consequence, results of projects should be more effective, providing a visible and significant impact to an industrial sector of high priority. This scheme can be implemented in case of applied research and technology development programs provided by the *Science and Technology Development Act*, as well as for innovation development projects supported by the *Innovation Activity Act.*

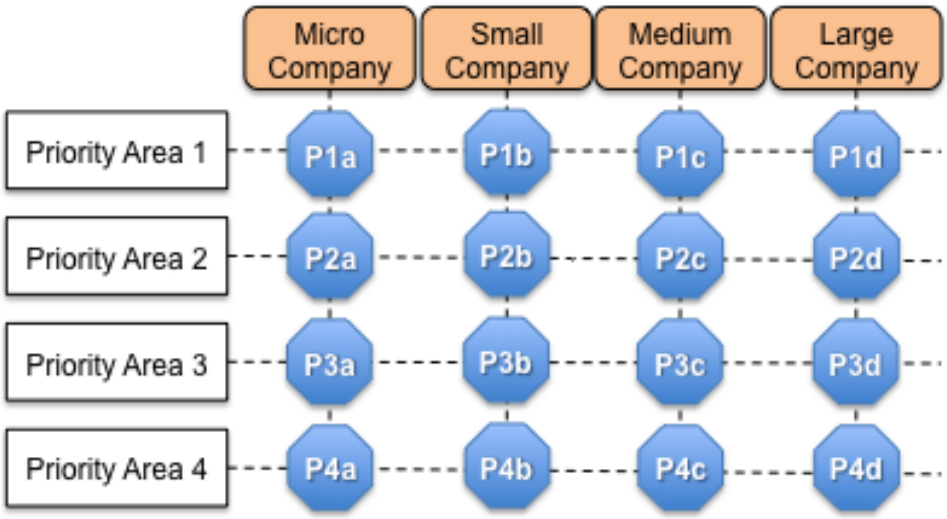

Figure 2 Specific programme groups for each priority application area and type of company

Grant holders and project coordinators should be companies developing innovative products or services for global and local market. They will be obliged to include in their project proposals, HEIs and applied research institutes (ARI) as project partners, responsible for applied research and specific development tasks. In some cases, such as in case of micro or small companies, HEIs and ARIs may be also founders and shareholders of these companies. Depending of the type of projects in these program groups, call for proposals may be opened every year, or some of program should be open permanently, as ideas for innovations and needs for their analysis and elaboration may occur in any time and do not need to wait annual program calls. This might be the case for short projects with small budgets, but with needs to evaluate and elaborate innovative ideas as soon as possible.

This recommendation of replacing current *"one (program) for all (application areas)"* with *"many (specific programs) to few (priority application areas and types of companies"* should be more effective and efficient. So, ***our recommendation is the implementation of "many to few" program paradigm instead of the existing "one for all" program paradigm in case of applied research and innovation development projects***.

Innovation Activity Act:

Innovation Activity Acts provides the legal framework for innovation development *predominately realized by knowledge-based companies* (from micro to large companies), collaborating with HEIs and research organizations, that commercialize results of their basic and applied research, or development of innovations based on newly developed technologies (globally or locally) aiming to offer new innovative products, processes or services on the market.

1. Public-private funding of market-driven R&D and innovation development projects, coordinated and managed by companies, but with participation of universities and R&D organizations financially supported by public funds, by implementing the recommended "many to few" program paradigm.
2. Support the establishment of organizations and units at universities dealing with the innovation activities, with a simple registration.
3. Besides grants for R&D and innovation development projects, new public and public-private funding mechanisms for innovation development should be introduced:

a) Matching public and private funding of **innovation development projects**
b) Public-private **venture capital funds** for investment to high-technology start-ups for innovation development (joint start-ups)
c) Public-private **business accelerators** for commercialization of new ideas
d) Public **angel funding** of the initial prototyping of initial idea for innovation.
e) Public funding of **due diligence** of ideas for new innovations
f) Implementation of **crowd investment model** to support of start-ups with ideas for new innovations – creating the legal framework and support

4. Public funding to support of ST parks, incubators, innovation centers, TTPs, IPR offices
5. Encouragement of innovation activities in academic, research and all other sectors and also support all other forms of transfer and diffusion of innovative solutions.

a) Offer a permanent open call for proposals of innovation projects (duration-one year, grant – up to 10.000 EUR) for elaboration, analysis and testing of new ideas for innovations.
b) Annual calls for proposals of innovation projects (duration – one/two years, grant – 30.000 EUR)

6. Matching public-private funding to support of **joint university-industry centers** for research, education (MSc & PhD levels) and innovation development, aiming to attract foreign and local companies to invest and cooperate with universities.

2.1.2 Recommendation to HEIs

1. All three dimension of the 3rd mission: Continuous Education (CE), Technology Transfer (TT) and Social Engagement (SE) should be included in the mission and in the development strategies of universities.
2. Support of TT, entrepreneurship, and development of innovations
3. Develop third mission indicators and ranking methodology of HEIs
4. Institutions should develop separate action plans for CE, TT and SE and include quality assurance (QA) procedure for these three pillars into institutional documents on quality control and assurance
5. Inform all stakeholders of third mission activities of HEI
6. Rise and disseminate awareness of the third mission of HEIs
7. Encourage the entrepreneurial spirit in academic environments
8. Increase of investments in capacity building of the third mission.

Achieved results and impact in Serbia based on recommendations set-up on Policy seminar and in benchmarking analysis

Based on the Policy seminar and debate on establishment and development of the third mission at Serbian universities held in Palace of Serbia that was organized in April 2016, a set of recommendations were developed in order to strengthen capacities to develop and implement the third mission.

Also, the benchmarking analysis and a set of consensus meetings were organized at the Serbian universities with the aim to have an open discussion of relevant stakeholders (representatives of faculties, industry, SMEs, clusters and associations of enterprises, regional development organizations) on further development activities.

The recommendations from Policy seminar, benchmarking report and consensus meetings were presented to the representatives of Ministry of Education, Science and Technological Development in order to influence the amendment of existing and creation of new legal acts.

The recommendations provided were taken into consideration and new measures that support the development and implementation of third mission were incorporated in new strategies and acts.

Law on Funds for Science

The Law on Funds for Science of the Republic of Serbia was adopted by the Government in November 2018 and has been forwarded to the Serbia Assembly.

This new law systematically regulates scientific and research activities, policies and measures for encouraging scientific and technological development. It is a kind of a framework for improvement of support system to scientific and research area in terms of support to better and more intense application of research results that contribute to the economic development of the country.

Previous reforms of scientific and research sector had the aim to stimulate individual and joint contributions of the research dominantly through publication of scientific papers. This lead to the significant increase of the total number of publications. However, the impact of this kind of policy lead to limited contribution to the strengthening of only scientific and research institutions and financing of most competitive projects. This is why new steps for most thoroughly reform were undertaken and focus is directed on the change of model of financing of the science.

New Law gives in more details the provisions that regulate the establishment of Fund for Science of the Republic of Serbia that will provide financial support to the projects in such a way to secure increased competitiveness and quality of results, more efficient application of research, openness and availability of program and projects results as well as development of scientific human resources, integration into international scientific and technological projects and systems, cooperation with scientific diaspora, industrial sector and provision of ownership rights of the research results.

The Funds programs will be determined in the following form and are dedicated to the overcoming the problems identified in the practice:

1) Development – the program of basic and applied research and technological development that corresponds directly to the specific needs of society and industry.

2) Strategy – the Program will respond to the specific problems defined in sector strategies adopted by the Serbian Government, through top-down public calls.
3) Ideas – this Program for financing of project based on excellent ideas that can have significant impact on development of science and research in the future, as well as the society at large.
4) People – the Program is designed for development of staff through financing of various activities (support to research, forming laboratories, international cooperation, etc.).
5) Infrastructure – the Program support the forming, building, maintenance and improvement of institutions and laboratories of strategic significance in line with the Strategy Research for Innovations, smart specialization and road map for research infrastructures and other relevant strategies.
6) Cooperation – the Program of strategic support to international cooperation and including the individuals, teams and institution in relevant international projects (Horizon 2020 and other)
7) Innovations – the Program of cooperation with industry realized with the Innovation funds and other entities has the aim the realization of projects with the participation of partners from industrial sector with mandatory application of research results
8) Promotion – the Program of support to the promotion of science, technological development and innovation with the aim to raise awareness on the significance of science
9) Publications – the Program supports the development of domestic publications with international credibility and publications of strategic interest for the Republic of Serbia
10) Creativity – the Program of support to the development of scientifically-based ideas in art and creativity
11) Other – other relevant programs with small budgets that Scientific council of the Fund can recommend in line with current needs

The recommended solutions will have positive impact on all legal and physical entities in Serbia that perform the research and scientific activities or are the users of scientific and research results. It will lead to the promotion of scientific and research activities of researchers, increase of research quality, increase of cooperation between research and industrial sector and achievement of higher effect on application of research results with the aim to increase the competitiveness on local and global market.

New Law will also motivate the establishment of companies based on knowledge and in such a way increase the employability through opening new job positions.

Smart Specialization Strategy

The Key element of smart specialization if the Research and Innovation Strategy for Smart Specialization (RIS3). The key element for successful development of the strategy is the entrepreneurial discover process (EDP) which refers to the continuing public-private dialog among four spheres of modern innovative society (academic sector, government, industry and civil society).

The aim of the RIS3 is to focus the development investment towards the areas where Serbia has a critical mass of knowledge, capacities and competences and where it has innovation potential to position on the global market.

The Ministry of Education, Science and Technological Development coordinates the interagency working body for development of the Strategy RIS3 and members of Analytical and Operation teams are appointed. The activities are performed in coordination with Joint Research Center of

European Commission that development the general methodology and provides the technical support to Serbia.

Taking into consideration the general framework provided by JRC, the activities performed so far are:

- First three phases with the analysis of current economic, scientific and innovative potential are fully completed
- Qualitative study of the examples for innovation potential of software industry was conducted
- First step of fifth phase was conducted related to the EDP training for initial EDP team.

At the beginning of the designing the RIS3 in line with the JRC's framework it is necessary to analyze the strategic mandate with its 3 phases:

1. The review of existing politics and priorities relevant for S3 has the aim to identify existing economic, scientific and innovation priorities incorporated in the strategies and polities together with the instruments for their implementation.
2. Decision on the position of S3 in strategic framework – the Ministry expressed its opinion that RIS2 needs to form the Policy mix for better cooperation of science and industry with the participation of Innovation Fund with new instruments for support, science and technology park, higher education and research institutions, while the institution of lower level of education of RIS3 are not included in policy mix.
3. The decision on national and regional dimension S3 – the size of the country and the lack of the administrative structure do not provide the base to develop the Strategy separately for each region, but the Strategy needs to be developed at the national level. in order to include the key stakeholders from all parts of the country activities should be implemented in bigger cities across the country. The common agreement is to outline the Strategy at the national level, but to allow possibility to geographically transfer the center of certain areas of specialization into the regions where they are present at the highest degree.

The development of the draft of Strategy is expected by the end of 2018.

2.2 Dimension 2: Continuing education

Universities have to respond promptly to new market needs and job requirements, due to dynamic changes in our social, economic and industrial environments. Education "for whole life" does not work anymore. New jobs, and even new professions are occurring each year. Universities need to adopt itself to these dynamics, by offering new or modified existing academic programs according to new needs of job markets and predictions of future needs of employers. Life-Long Learning (LLL) and Continuing Education are the responses to these challenges. Employees need to adopt their skills and knowledge to new job requirements and unemployed need to modify and upgrade their knowledge and skills according to job markets demands. Due to these reasons, Continuing Education (CE), the 2nd dimension of the 3rd mission of universities, is becoming "a must" that university have to provide. It is not difficult to predict that CE will become equally significant or even predominately form of education that university are going to offer in near future.

In order to respond to these challenges and development opportunities, Serbian universities need to change themselves, but also, Serbian legislation for HE needs to be modified according to the needs of CE. Some of the most important recommendations for legislators and HEIs will be given in this section.

2.2.1 National legislation related to the continuing education

The *Adult Education Strategy* and *Higher Education Act* should be modified according the following recommendations:

1. *CE legislation:* CE should be a regular form of higher education as it is now in the case with higher education of young students (age 18-24).
2. *Short-cycle programs and online & blended learning:* The legislation should allow HEIs to offer the most convenient modes of education (such as online or blended e-learning, or F2F seminars and workshops) to CE students (age 30-60), providing durations of CE programs as short as possible, and providing learning personalization as much as possible. *Short-cycle programs and courses* may be the most convenient form of education to many CE students and may complement normal academic bachelor and master programs.
3. *External lecturers:* HEIs should be allowed to hire experts from companies and from other organizations that are the most competent for transfer of new knowledge and skills, not yet provided by lecturers employed at HEIs. This provides needed flexibility, access to new knowledge and skills, and minimizes time to job market needs. These "*expert lecturers*" should not need to have PhDs, but should have relevant implementation references and should be experts in disciplines and application areas that they teach[1]. University professors may be engaged to supervise their teaching, according to specified program curricula and their course syllabi.
4. *No accreditation for HEIs:* CE short-cycle programs and courses should be developed and offered in minimum time, in order to answer to new job market needs. This is the main reason why they need not to be accredited if HE is already accredited for relevant academic programs. But, HEI must have institutional rules for development of and internal approval of new short-cycle programs and courses. Institutional rules must be compliant

[1] This is the practice of the Danube University Krems (DUK), our project partner from Austria, is hiring large number of external lecturers.

with recommendations specified by the National Council of Higher Education. Service providers of short-cycle programs and courses that are not HEIs need to get the accreditation for their programs and courses.

5. *Quality assurance (QA):* QA system should be introduced for formal and non-formal adult education at all levels
6. *Funding:* Different funding sources (private sector, individuals, fiscal policy, international projects) are necessary to provide support to CE students in order to minimize their financial contributions. Scholarships for CE education should be partially supported from public funds, especially for highly demanded job skills. Companies paying scholarships for their employees or students should have appropriate tax deductions. Special loans for the subsidized scholarship should be provided for CE students. Cooperation with international organizations is needed for better access to LLL funding programmes. A national campaign is necessary in order to change the mindset regarding the adult educations and need for appropriate public, private and individual funding for CE education
7. *Educational demands:* Support of partnerships at local, regional and international levels between the service providers and service users in order to define the educational demands.

   The National Council and local councils should be established to identify current and future needs of employers and of new jobs, as well as for consulting in the area of development of human resources. A development of a model of participation of social partners in curriculum development needs to be introduced.
8. Adopt the National Qualification Framework
9. Define the concept of part-time studies and its legal support
10. Increase investment in human recourses (capacity, knowledge…)

2.2.2 Recommendation to HEIs

1. CE/LLL should be part of the overall university strategy and a more specific CE/LLL strategy should be specified that defines mission, vision, goals and subordinate goals, and a time-plan for the continuing education activities of the university.
2. Specify a policy and regulations regarding the establishment of new CE/LLL programs.
3. Specify a metric and analysis for income gains by CE/LLL programs and courses.
4. Specify a policy for the use of university staff for LLL programs (e.g. teaching or administration as part of the regular job, or an additional assignment outside normal working hours with extra remuneration).
5. *Clear responsibilities for CE/LLL* within the university management should be specified, e.g. a vice-rector or vice-deans for continuing education.
6. *Establish a Continuing Education office* that runs all newly-established LLL programs; CE office develops the program portfolio; CE office gets a professional manager (full-time). CE office may have a separate brand and market appearance or can become a separate legal entity (company) owned by the university.

7. Short-cycle programs: Duration of short-cycle programs, consisting of many short courses, correspond to one to four normal semesters, and may provide for 60 to 120 ECTS[2]
8. Target groups of CE students are former students of the same institution and students from other institutions. English-taught programs are also recommended to attract international students.
9. It is a good practice that university runs joint programs – with other scientific institutions or with other players
10. A central e-Learning Center is recommended to supports blended learning and online courses.
11. University should adopt a specific pedagogical concept for continuing education.

2.3 Dimension 3: Social Engagement

2.3.1 National legislation related to the social engagement

1. The legal framework should
    a. support the development of competitiveness and innovativeness of SMEs through better collaboration with universities (TM activity) and
    b. provide tax incentives systems for R&D education and training expenditures.
2. It is recommended that the national legislation
    a. introduces performance indicators (limited number) to assess the progress of universities regarding the third mission activities and to monitor long-term impact and they should be included in statistics regularly required by the Ministries;
    b. reduce the gap between education and employment through well-defined enrolment policy and monitoring of labor market needs;
    c. establishes several levels of quality control and monitoring of third mission activities (local, regional, national).

2.3.2 Recommendations to HEIs

1) Universities must leave their comfort zones (pure teaching and fundamental research) and establish better communication based on thrust with enterprises and other external institutions
2) Universities should
    a) develop and introduce in practice the third mission policies and implement related legal framework;
    b) focus more on partnerships, young people and creativity as the drivers for change;
    c) enable the development of academic entrepreneurship;
    d) develop the strategy for development of third mission within TM dimensions;
    e) strengthen first two missions (education and research) in terms of quality, efficiency and relevance for society before the development of third mission.
3) Universities need to
    a) motivate academic staff and students to direct their activities towards society needs;

[2] DUK had over 9.000 CE students in 2015, and the average ECTS of a Continuous Education course is 90 ECTS.

b) build the creativity culture and entrepreneurial spirit among students, faculties and its staff;
c) enable the development of academic entrepreneurship;
d) consider the graduates (alumni) while implementing third mission activities;
e) evaluate of third mission activities performed by academic staff and to introduce these criteria in the criteria for professional advancement;
f) engage student organizations and students in third mission activities especially within the social engagement dimension through volunteering and in some case paid activities within universities scholarships;
g) identify examples of good practice in implementing of TM activities and promote them on different media;
h) Encourage the establishment of spin-offs at universities

4) TM activities of universities are crucial for development and implementation of the Smart Strategy in Serbia, aiming to identify regional or sectorial strengths, specificities and potential in both industrial and research sector.

2.3.3 Recommendations to academic staff

1) Academic staff need to

a) be more engaged in fund raising activities through preparation of project proposals within EU funding schemes (e.g. Horizon2020), which will improve their research capacities (human resources, scientific equipment);
b) identify the research results that could be commercially exploited and to find the appropriate partners and ways for their transformation into innovations;
c) file for patent application before the submission of scientific papers and doctoral dissertations to repository (in case that this kind of IPR protection is needed);
d) boost the creativity of students with multidisciplinary group student projects;
e) encourage students and young researchers to develop their ideas and to change the mind-set.

2) If commercialization of results is possible at international level, IPR protection should be extended from national to international level.

3) In case of multiple innovators/applicants for IPR protection - to use the open concept with predefined ownerships, rights and obligations, terms of exploitation in Partnership Agreement before the collaboration starts.

2.3.4 Recommendations to all stakeholders

1. Establishment of innovation ecosystem, through involvement of relevant actors
2. To form the Ministry for Higher Education, Science and Innovation Development
3. The First and Second Missions of HEIs need to provide the quality, as preconditions for success of the Third Mission.
4. Better communication within and among academic, scientific, research community, business sector, etc.
5. To emphasize the role of university-industry cooperation and foster it through specific programmes and government incentives
6. To raise awareness on the specificities of Serbia in the area of third mission development
7. To introduce and implement Crowd Funding concept in order to support idea development and launching the innovations on the market

8. The chambers of commerce need to be more present and visible as key actor in third mission development
9. Business incubators and ST parks should cooperate closely with universities and initiate jointly with them the establishment of start-ups and spin-offs

To conclude, we emphasize the recommendations given to legislators regarding the modifications of three relevant laws (Higher Education Act, Science and Technology Development Activity Act, and Innovation Activity Act), and sets of recommendations to universities and other HEIs, all related to the development and implementation of their 3rd mission, along all three dimensions: Technology transfer and innovation development, Continuing education, and Social engagement.