



FINAL WORKSHOP

WORKING PACKAGE 2

R E P O R T

18th October, 2018

FOREWORD

Faculty of Security Studies (University of Belgrade) as a carrier of the Working Package 2 of the project ImprESS – “Academic and Professional Education Capacity in Serbia in the Area of Safety & Security (by Means of Strategic Partnership with the EU)”, organized the final workshop on October 18, to present activities carried out in researching, classifying, and analyzing the EU higher education legislation, Serbian higher education legislation, as well as other significant legal acts that could affect the project tasks and goals.

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ABBREVIATIONS USED IN THIS REPORT

EHEA – European Higher Education Area

EU – European Union

NQFS – National Qualification Framework of the Republic of Serbia

S&S – Safety and Security

WP2 – Working Package 2 (in context of the ImprESS Project)

CAQA – Commission for Accreditation and Quality Assessment of the Republic of Serbia

MPNTR – Ministry of Education, Science and Technological Development of the Republic of Serbia

FSS – University of Belgrade, Faculty of Security Studies

HE – Higher Education

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1. TECHNICAL INFORMATION ON THE FIRST WP2 WORKSHOP

The final workshop of the working package 2, presented unique channel for discussions about the final results presented by the FSS project team members. It took place at the premises of the Institute of International Politics and Economics (25 Makedonska St, 11000 Belgrade), on October 18th, 2018. According to the Agenda, Workshop has lasted for 7 hours, and was split into eight plenary sessions, official opening and closing remarks, followed by the Steering Committee meeting as well as the Project Executive Committee meeting.

Beside the FSS representatives, the Workshop has gathered representatives of domestic and foreign partners within this project. In total, there were 18 active participants within this workshop. The official opening was chaired by Dr. Zoran Jeftić.

It continued with the presentation of analysis of the EU legislation in higher education area, as well as the Serbian ones. In this context, project team have introduced the improved and finalized versions of the **Inventory for the EU higher education legislation**, as well as the **Registry of tasks and educational requirements in S&S area**. After the presentation on potential model for bilateral and multilateral agreements among the consortium partners, a model for cooperation was introduced, in sense of establishing the joint study programmes and courses in safety and security area. At the end, a fruitful discussion took place among the Workshop participants.

The detailed agenda, all the .PPTs, and all other multimedia contents could be found at the official ImprESS project website: <http://impress.kpa.edu.rs/index.php/events>

The ImprESS project team could be reached at the official social media accounts:

TWITTER: <https://twitter.com/ImperESS>

FACEBOOK: <https://www.facebook.com/ImpressProjectERASMUS>

LinkedIN: <https://www.linkedin.com/in/impress-project-0227ab14b>

This report was made by the FSS ImprESS project team members, who could be reached at the following e-mail address:

impress@fb.bg.ac.rs

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Report approved by: Dr. Petar Stanojević, Leader of the UB FSS ImprESS project team

2. WORKING PACKAGE 2 - LOGISTICS

2.1 RATIONALE AND TEAM OF THE WP2

The Working Package 2 tasks are being supervised and guided by Dr. Mladen Milošević. Operative tasks within the Working Package 2 are divided into several Working Groups, which have their concrete tasks, deadlines and expected outcomes. Each Working Group has its own leader who is in charge for work organization and announcing the expected results on behalf of his/her group. The Working Groups are established by the decision of the UB FSS Dean.

The Working Package 2 leader and person in charge of organizing the work and delivery of the results is Dr. Mladen Milošević, responsible to Dr. Petar Stanojević.

Working Groups consist of the following members:

WG 1: Žarko Obradović, Vanja Rokvić Želimir Kešetović, Zoran Keković, Aleksandra Ilić, Ivan Dimitrijević.

WG 2: Božidar Banović, Vladimir Cvetković, Zoran Keković, Nevena Nastić.

WG 3: Mladen Milošević, Petar Stanojević, Zoran Jeftić.

WG 4: Petar Stanojević, Vladimir Cvetković, Žarko Obradović, Ivan Dimitrijević, Mladen Milošević, Zoran Jeftić.

WG 5: Petar Stanojević, Zoran Jeftić, Aleksandra Ilić, Mladen Milošević, Želimir Kešetović, Ivan Dimitrijević.

Designing the Model is based on prior review and consideration of the legal framework and its implementation, with clear identification of risks, shortcomings, contradictions and gaps. The project proposal clearly divided the stages of building the Model as the primary goal of the package. They refer to:

- analysis of internal, supranational and international legal regulations of the higher education system;
- conducting reviews and analyzes of existing study programs in the field of security;
- the definition of the Preliminary Model and the holding of a workshop with the local members of the Consortium, which would discuss the advantages and disadvantages of the Preliminary Model;
- the adoption of the final Model Template with the development of a model of multilateral and bilateral agreements between members of the Consortium in order to create a knowledge union;
- dissemination of results to domestic and foreign participants of the Consortium and other relevant actors.



Successful implementation of WP2 is the basis for the following work packages - selection of subjects, design of concrete study programs, exchange of teaching staff, etc.

The FSS ImprESS project team has identified several key outcomes of this final Workshop, of the Working Package 2:

1. Established Registry of Tasks and Educational Requirements in Safety & Security Area;
2. Established Inventory of the EU Legislation in HE area;
3. Created the bilateral & multilateral agreements' proposals amongst interested parties;
4. Proposed the final Model of cooperation;
5. Introduced deeper communication among the domestic consortium partners;
6. Achieved preconditions for further feed-back system.

3. INTRODUCTORY NOTES

3.1 EXCERPT FROM THE PROJECT

Model for improving the educational capacity in the area of "sector skill alliance" for Safety & Security (WP2) tends to form a new alliance of high educational institutions inside the country as well as with European partners. This alliance will be formed on the basis of bilateral and multilateral agreements in which new possible directions of lecturers and students "flows" would be determined. Selection of modules and courses that can be jointly implemented will certainly bring new offers to the Serbian educational "market". Joint realization which will allow study competition in some of the European countries with one or two diplomas is still a novelty in Safety & Security area of the Serbian educational system. National qualifications and accreditation schemes tend to be improved during the process.

Setting up the infrastructure for applying the Model (WP3) presumes transposition of educational modules and courses to Serbian universities. Serbian lecturers would pass the procedure of job shadowing and teaching lectures on partner universities in Europe obtaining new skills and knowledge, simultaneously improving language abilities. New lecturing materials will be prepared as well, aiming to improve the quality of presentations to the highest level. Majority of courses would be developed for e-learning. E-testing will be developed together with marking schemes for each test which represents a novelty for now days' common approach.

Applying the Model in Serbia (WP4) will, beside implementation of new modules and courses, mean establishment of the courses evaluation from both European colleagues and students which is not very common now.

3.2 WORKING PACKAGE 2 AND THE FINAL WORKSHOP IN CONTEXT OF IMPRESS PROJECT

The first Workshop was organized on October 18th, according to the project task matrix as well as in accordance with the ImprESS project timeline. As defined by the project timeline, Working Package 2 will last until the end of 2018.

Table 1. Overall Working Packages of the ImprESS Project

WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8
Preparation	Model for improving the Educational Capacity in "Sector Skill Alliance" for S&S	Setting up the Infrastructure for applying this Model	APPLYING THE MODEL IN SERBIA	Establishing TESS Centre	Quality	Dissemination	Management
Coordinator	FSS		SGSP	ATRISC, Coordinator SHB,UB,UNID, SGSP	All participants	R-Tech KG, supported by SHB & Serbian participants	Coordinator

3.3 REVIEW, SELECTION AND ANALYSIS OF DIRECTIVES AND THE EU LEGISLATION IN HIGHER EDUCATION AREA

The second presentation of the Workshop has been delivered by prof. Žarko Obradović, a FSS Project Team member. This presentation aimed at reviewing, selecting and analysing EU legislation in HE area, as well at showing the first outcomes of the analysis of relevant mechanisms for referencing Serbian education system with the European Higher Education Area – EHEA. In Bologna in 1999 the Ministers of Education of 29 countries agreed on a common vision of a European Higher Education Area, with intention to reform the higher education and harmonization, and to create the EHEA. They found that this vision was politically relevant for their own countries and translated it into the operational goals listed in the Bologna Declaration. In the past 19 years the Bologna Process, through voluntary convergence and an intergovernmental approach, has led to the construction of the main periods:

- A **common framework until 2010**, which includes the overarching Framework for Qualifications of the EHEA, a common credit system (ECTS), common principles for the development of student-centered learning, the European Standards and Guidelines for Quality Assurance, a common Register of QA Agencies, a common approach to recognition, and a common body of methodologies and sustainable achievements produced by European HEIs – the so-called **Bologna Process**.

- The second part (after 2010), was dedicated to the **EHEA establishment**.

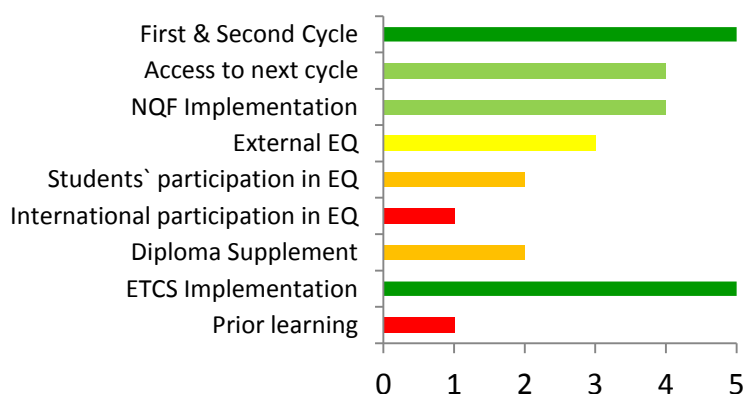
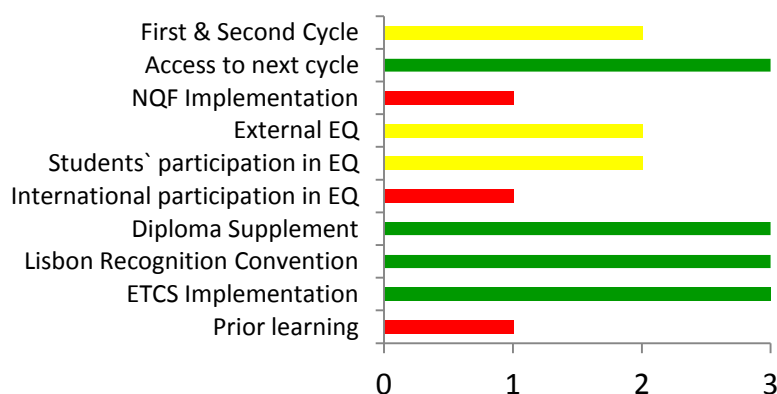
The pan-European character of the process should be enhanced, its added value for national policies should be made more visible, and steps should be taken to involve the entire academic community – teachers, students and administrative staff - in elaborating the concrete paths toward its realization.

Fact sheet 1. Republic of Serbia and the Bologna process

- Republic of Serbia entered into Bologna process in 2003
- Law on Higher Education of the Republic of Serbia – 2005
- Law on Higher Education of the Republic of Serbia – 2017
- Republic of Serbia actively participated within the conferences, in Berlin (2003), Bergen (2005), London (2007), Leuven (2009), Bucharest (2012) and Yerevan (2015).
- The last three conferences have introduced the set of 10 indicators and measures for the results per single country.

Chart 1. Republic of Serbia scores

Results for Serbian HE in Leuven Report - 2009 (left), and in Bucharest Report 2012 (right)



*In 2009 Report, there was an additional indicator: *Implementing Lisbon Recognition Convention*, which was not being measured afterwards.

The first measures for Serbian higher education system in accordance with the Bologna process, was expressed in a Leuven Report, and issued in 2009, in which Serbian HE has been marked as (very) successful in seven indicators out of 10. National Serbian NQF law was adopted on Thursday, 5th of April 2018, by Serbian Parliament. National Framework of Qualifications in Serbia (NQFS) is an integral part of the European integration process and the Chapter 26 – Education and Culture, with the planned referencing to European Qualifications Framework and mobility of workforce.

The Paris Conference of European Ministers Responsible for Higher Education 24-25 May 2018 adopted the revised overarching framework for qualifications in the EHEA, implementing the commitment in the Yerevan Communiqué. The revised overarching framework for qualifications in the EHEA comprises: the short cycle, the first cycle, the second cycle and the third cycle generic descriptors for each cycle based on learning outcomes and competences, and credit ranges in the short cycle, first and second cycles.

The Law on NQFS shall envisage the establishment of a special Qualifications Agency, with the aim of providing quality on all levels of development and implementation of the National Qualifications Framework in the Republic of Serbia (NQFS).

The purpose of the referencing is to present transparently to other countries the way Serbia has connected its levels of qualifications with EQF and thus provided the fulfilment of appropriate procedures and criteria (ten) for the referencing.

In order to be able to approach the process of referencing NQFS with EQF, it is necessary for Serbia to prepare a Report on Referencing, with the help of international experts, whose integral part shall be a Supplementary Report on the Self-assessment of NQFS in the field of higher education compared to Qualifications Framework in the European Higher Education Area (EHEA QF).

3.3.1 CRITERIA FOR SERBIAN NQF IN REFERENCING THE EQF

The European Commission alongside its agency ENQA have published 10 general criteria¹ for referencing the national qualification framework with the European. As Serbia adopted Law on Serbian NQF, situation slightly improved, and now NQFS fully fulfils only four (No. 1, 8, 9 and 10) out of total ten criteria, while three of them (No. 2, 3 and 6) are fulfilled partially. The rest 3 criteria (No. 4, 5 and 7) are not fulfilled at all.

COMPLETELY FULFILLED

PARTIALLY FULFILLED

NOT FULFILLED AT ALL

Criterion 1. The responsibilities and/or legal competence of all relevant national bodies involved in the referencing process, including the National Coordination Point, are clearly determined and published by the competent public authorities.

Criterion 2. There is a clear and demonstrable link between the qualifications levels in the national qualifications framework or system and the level descriptors of the European Qualifications Framework.

Criterion 3. The national framework or qualifications system and its qualifications are based on the principle and objective of learning outcomes and linked to arrangements for validation of non-formal and informal learning and, where these exist, to credit systems.

¹ More available: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017H0615%2801%29>
(10.07.2018)

Criterion 4. The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualification system are transparent.

Criterion 5. The national quality assurance system(s) for education and training refer(s) to the national qualifications framework or system and are consistent with the relevant European principles and guidelines (as indicated in annex 3 of the Recommendation).

Criterion 6. The referencing process shall include the stated agreement of the relevant quality assurance bodies.

Criterion 7. The referencing process shall involve international experts.

Criterion 8. The competent national body or bodies shall certify the referencing of the national framework or system with the EQF. One comprehensive report, setting out the referencing and the evidence supporting it shall be published by the competent national bodies, including the National Coordination Point, and shall address separately each of the criteria.

Criterion 9. The official EQF platform shall maintain a public listing of member states that have confirmed that they have completed the referencing process, including links to completed referencing reports.

Criterion 10. Following the referencing process, and in line with the timelines set in the Recommendation, all new qualification certificates, diplomas and Europass documents issued by the competent authorities contain a clear reference, by way of national qualifications systems, to the appropriate European Qualifications Framework level.

NOT FULLFILED AT ALL:

- **Criterion 4:** Even though the Law on National Framework Qualification has been adopted in April 2018, its drafting, public hearings, contributions from the experts, and all other important issues in law adoption process were non transparent. Some of the qualifications do not coincide with the European ones, nor with the national needs of the Serbian education system.
- **Recommendation:** Due to heavy critics the law had faced with, it is necessary to amend it with more precise qualification subgroups and with more public debates involving various stakeholders in this process, prior to further adoption of the amended law. Besides, the descriptors in some areas do not coincide with the ones recommended by the EQF.
- **Criterion 5:** National quality assurance system for education and training is not developed in details within the law on Serbian NQF. Even though it mentions the “European values” as the basis on which the education of future education should be done, it is still not fully consistent with the European principles and guidelines.

- **Recommendation:** Republic of Serbia should work further in establishing the dully system of compliance to the following quality assurance and guidelines:
 1. quality assurance policies and procedures should underpin all levels of the European Qualifications Framework,
 2. quality assurance should be an integral part of the internal management of education and training institutions,
 3. quality assurance should include regular evaluation of institutions, their programmes or their quality assurance systems by external monitoring bodies or agencies;
- **Criterion 7:** No single case of involvement of foreign experts as requested by this criterion, was registered in referencing process. However, some international cooperation done by the Serbian Ministry of Education, Science and Technological Development have been successful (twinning programmes in referencing process).
- **Recommendation:** As the Republic of Serbia moves forward in the EU accession process it will establish stronger ties and links with not only individuals, but to the institutions and bodies such as the ENQA, thus, the involvement of foreign experts will be(come) usual practice in further development of referencing process.

PARTIALLY FULFILLED:

- **Criterion 2:** A clear and demonstrable link between the qualifications levels in the national qualifications framework or system and the level descriptors in partial in case of Serbian NQF. Even though the education and training levels fully comply with the European, Serbian descriptors slightly differ from the recommended ones.
- **Recommendation:** Each cycle descriptor offers a generic statement of typical expectations of achievements and abilities associated with qualifications that represent the end of that cycle. However, terminology in descriptors is not as same as the one used in the EQF. Changes of terminology could be done either through amendment of the current law, either with the bylaw act.
- **Criterion 3:** Serbian NQF validation of non-formal and informal learning is not fully affiliated with the existing credit systems. Even though Serbia participates in Youthpass and Europass mechanisms, the recognition of the informal learning is not official, thus, one can not attach it to his/her diploma as a supplementary activity.
- **Recommendation:** The process of validation the ECTS highly depends on the full membership of a country within the European Union. Once Serbia obtains this status, it will be obliged to officially recognize all the informal ways of learning through the educational system expressed in the ECTS.
- **Criterion 6:** According to this criterion, the referencing process shall include the stated agreement of the relevant quality assurance bodies. However, Serbia did not manage to fully secure this request as its national quality assurance agency is

technical observer within the ENQA, thus, it does not have full privileges as the full members.

- **Recommendation:** Serbian quality assurance agency (KAPK) is at the moment (July 2018) an observer within the ENQA, for two more years of prolonged membership. After this period, it could be granted with full membership, either its membership shall be ceased. Besides, there are some other internal quality assurance mechanisms guaranteed by domestic laws, so the process is being partially evaluated.

REFERENCING MECHANISMS IN HIGHER EDUCATION

The full EU membership for the Republic of Serbia is *condicio sine qua non* in terms of fully harmonized mechanisms' implementation within the Serbian HE.

The very latest mechanism is the DEQAR. The main aim of the DEQAR project is the development of a database that will enhance access to reports and decisions on higher education institutions/programmes externally reviewed, by an EQAR-registered agency.

The database is expected to enable a broad range of users, including but not limited to:

- Recognition information centres (ENIC-NARICs)
- Recognition officers in higher education institutions
- Students Quality assurance agencies
- Ministry representatives and other national authorities
- **REPUBLIC OF SERBIA IS NOT A MEMBER OF DEQAR!**

Table 2. Republic of Serbia status within the mentioned mechanisms

MECHANISM	REPUBLIC OF SERBIA STATUS
Youthpass	Serbia is not formally member of the Youthpass system, even though, all the NGOs participating within Erasmus+ Youth in Action programmes, could freely issue the Youthpass.
Europass	No membership existence. <i>De facto</i> all EHEA countries are implementing it.
ENQA	Serbia is a full member from 2013 (Commission for Accreditation and Quality Assurance) Selfevaluation report 2012-2015 available (SRB only): https://goo.gl/kGpnuw
EQAR	Formally Republic of Serbia is a full member from 2014; Serbian higher education institutions can't choose an EQAR-registered agency for their mandatory external quality assurance. Neither the European Approach is available to higher education institutions in Serbia.
EQUAVET	Serbia is not a member. Full EU membership required. EU Member States, European Economic Area countries and European Commission.
ECVET	Serbia does not have a local point. No further information applicable.
DEQAR	Serbia is not a member of the DEQAR mechanism.

3.3.2 Inventory of the EU Legislation in Higher Education Area

The Inventory of the EU Legislation in Higher Education Area presents the unique index of chosen EU legislation (directives, laws, strategies, conventions, decisions, instructions, regulations and other acts). In its initial phase, Inventory shall be filled-in with relevant data, while afterwards it will present a tool of open source information about the current legislation related to the higher education within the EU. Inventory will remain as a durable outcome of the Working Package 2, even after the project as a whole is finished. It is under further consideration whether the Inventory shall be transmitted into an online database which could be easily accessed. For detailed variables of the Inventory, consult Annex 1 of this Report.

Mechanisms represent an informal group of instruments which contribute to fostering the harmonization process in education are between the national and European level. They include the following mechanisms: Europass, Youthpass, EQAVET, EQAR, ENQA and ECVET. Erasmus+ is the EU's programme envisaged for supporting education, training, youth and sport in Europe. With its budget approaching nearly 15 billion it provides opportunities to study, train, gain experience, and volunteer abroad.

The program is developed in compliance with the currently existing European laws. In this chapter, the documents related to higher education existing on the EU level are presented and summarized in the table below. The EU regulation related to the high education have been collected and stored into the Inventory of the EU legislation (in attachment). They have been categorized into the following groups:

- Conclusions
- Decisions
- Delegated regulation
- Directive
- Recommendation
- Regulation
- Resolution

The biggest attention should be given to the directives, which by definition must be incorporated by EU countries into their national legislation. A "directive" sets out a goal that all EU countries must achieve. However, individual countries may devise their own laws on how to reach these goals. Since Serbia is not a part of European Union yet, it is not obliged to adapt them. However, in accession process, Serbia is obliged to adapt and harmonize its national legislation with the European. Nevertheless, adaptation of the currently existing law in line with EU requirements may significantly strengthen a Serbian education system. Furthermore, in case of proposing dual study programs (e.g. EU country – Serbia) it is crucial to ensure the compatibility between relevant Member States' regulation and Partner countries' in this matter.

In this process, we identified numerous **CHALLENGES OF REFERENCING** with the EHEA and for harmonization with the EU legislation:

1. A pan-European approach vs. National diversity

The problem with the harmonization lays in the fact that EHEA region consists of more than 40 countries, with different historical, cultural and pedagogical traditions in education systems. All the national educational systems have been developed so that they can easily fit into the needs of national economy, and the market needs as well. The pan-European approach slightly neglects the differences requesting the same descriptors of education and training skills within the various education levels. This is exactly why Serbia for instance, partially fulfils some criteria, as its educational system is slowly being changed and not adapted to the real job market needs.

2. Process vs. Outcome

The EHEA legislation and referencing mechanisms, as well as the development of the Bologna process is a long term goal and idea(l) through which all the national states should adapt as much as they can. However, sometimes the EQF requests are rather outcome-oriented, demanding the fast and decisive outcomes in some areas which objectively need more time and experience to be achieved. This discrepancy is the key obstacle between the ENQA and the national quality assurance agencies, for instance.

3. Top-down vs. Bottom-up approach

This process is heavily oppressed between the two approaches: it involves both bottom-up and top-down scheme. As a two-way process of the cycle, sometimes it could happen that stakeholders mix their roles and omit to perform they commitments in efficient way.

4. Common standards vs. Flexibility

In harmonizing the legislation, sometimes, the European institutions (Commission) allows some level of flexibility to overcome the divisions among the member states, but this flexibility could be seen as a sign of weakness and not respecting the set requests. Thus, some countries participating at EHEA could misuse these flexible decisions and avoid compliance with harmonized legislation.

5. Global vs. Regional

In such a complex process which should product the best quality of education for youth, sometimes global needs are not the ones on which the regional premises are based on. This could be an obstacle, if an EHEA educated student is willing to participate at the global job market or to continue his/her education overseas.

6. The European Union Membership

As stated earlier, for some mechanisms it is requested for a state to enjoy the full membership status within the EU to be able to participate within them. As this is rather a political and a long term process, not many things could be done here, since it represents an independent case.



4. ANALYSIS OF HIGHER EDUCATION LEGISLATION IN SAFETY & SECURITY AREA IN THE REPUBLIC OF SERBIA

4.1. Overview of Higher Education Legislation in Safety & Security Area in the Republic of Serbia

The third presentation which was consecutively parallel with the third objective and task of the Project, was dedicated to analysis of Serbian legislation in HE area. It also was highly involved the analysis of current legislation of the Republic of Serbia in the area of safety & security in terms of academic and professional education. The presentation of these tasks was delivered by Ivan Dimitrijević.

The history of academic study programs in the field of safety and security in the Republic of Serbia, in its broadest terms, refers to traditional military education dating back in the mid-19th century, and institutionalized police education and training during the first decades of the 20th century.

These two traditions are today recognized within two leading security sector higher education institutions – University of Defence, and University of Criminalistic and Police Studies, keystones of military and police education in Serbia in the 21st century.

A broader higher education programs aimed at academic security education started in early 1970s in former Yugoslavia, as a part of comprehensive education of all citizens with the goal of raising awareness and preparedness for wartime and peacetime threats during the Cold War (so-called *Concept of General People's Defence and Social Self-Protection*).

Besides many study programs of General People's Defence that were founded within the existing university faculties across Yugoslavia (mostly within faculties of political science), the only independent faculty was established at the University of Belgrade. The Faculty of People's Defence of the University of Belgrade educated the future secondary school educators for the subject called *Defence and Protection* in Yugoslavia, which was an obligatory school subject at the time.²

Besides the Law on Higher Education and the Strategy, there are seven more laws, three bylaws, and one strategy directly or indirectly related to the area of higher education in the Republic of Serbia (Table 1). Besides usual laws related to scientific research and innovation (which is naturally connected to universities), to public services (many of which require specific higher education for enrolment), to other levels of education (elementary, secondary, lifelong learning), there is still a remnant from the past higher education systems, a specific law related to the military education, which acts as a parallel legislation

² Kešetović, Ž, Dimitrijević, I. & Stekić, N. (2018). Security Studies in Serbian Higher Education. *Security & Future*, 2(1), p. 11.

to the Law on Higher Education, specifically within its provisions related to higher education in the armed forces.

LAW/BY-LAW/STRATEGY	OFFICIAL JOURNAL OF THE REPUBLIC OF SERBIA NO.	ENTERED INTO FORCE / PUBLISHED
Law on Innovation Activity	55/2013	03/07/2013
Law on Public Services	83/2014	13/08/2014
Law on Scientific and Research Activity	112/2015	07/01/2016
Law on Adult Education	88/2017	07/10/2017
Law on the Foundations of Education System	88/2017	07/10/2017
Law on Higher Education	88/2017	07/10/2017
Law on Military Education	36/2018	09/05/2018
Law on Public Service Employees	113/2017	17/12/2017
Strategy for the Development of Education in the Republic of Serbia 2020	107/2012	9/11/2012
Strategy of Scientific and Technological Development of the Republic of Serbia 2016-2020	/2015	
Rulebook on Accreditation Standards for Study Programs	88/2017	07/10/2017
Rulebook on Accreditation Standards for Higher Education Institutions	88/2017	07/10/2017
Rulebook on Standards for External Quality Assurance for Higher Education Institutions	88/2017	07/10/2017

Table 1. Overview of relevant legislation in higher education in the Republic of Serbia

4.1.1. Higher Education Legislation with Emphasis on Safety & Security Area

The *Rulebook on the List of Professional, Academic, and Scientific Titles* (Official Journal of the Republic of Serbia, N^o 53/17, 114/17, 52/18), recognizes several different titles in the area of safety & security that are distributed throughout all the study levels:

- Protection Engineer/Disaster and Fire Protection Engineer;
- Workplace Safety Engineer;
- Security Manager;
- Environmental Protection Analyst/Engineer/Law Ecologist;
- Criminalist.

Another bylaw, *the Rulebook on Scientific, Art, and Professional Fields within Educational Science and Art Disciplines* (Official Journal of the Republic of Serbia, N^o 114/17), explicitly recognizes only Criminalistics as a field within Social Sciences and Humanities, while all the



other study programs in safety & security are implemented within other recognized fields, such as Management, Law, Political Science etc.

Study programs in safety & security are accredited in accordance with the Law and other legal documents, and every newly introduced program has to pass the criteria audited by the official state body for accreditation – the National Accreditation Body along with the Commission for Accreditation and Quality Assurance. The provisions on accreditation of study programs are also applicable to higher education institutions within the state administration security system (defence system, police system, security-intelligence system etc.).

4.1.2. Overview of Educational and Professional Requirements for Jobs and Tasks in Safety & Security Area

Professional education for security sector tasks and responsibilities is recognized in laws and by-laws regulating both higher education and security sector in the Republic of Serbia. Provisions regulating academic and professional education/training/licensing are more detailed within by-laws than in laws regulating specific security sub-sectors. All security sub-sectors and areas are covered within the analyzed legislation (laws & by-laws):

1. Defence system/armed forces
2. Public safety/police
3. Intelligence services
4. Emergency management/fire safety
5. IT security
6. Public information/personal data protection
7. Occupational health and safety
8. Private security/private investigators
9. Customs/money laundering/inspections

The result of the analysis of academic and professional requirements for security-related tasks within laws and by-laws regulating security sector in Serbia is a *Registry of Tasks and Educational Requirements in Safety & Security Area*. This Registry contains a list of laws and related by-laws along with list of security-related tasks, academic requirements (higher or other education, cycle, ECTS), type of training and/or professional exam, and the name of institution or authority responsible for training, education, professional exam, etc.

General observation about these legal requirements, is that in very few situations, mostly related to the security sector systems (armed forces, police), the specific higher education degree in safety & security is required, which is in these cases a degree from education system connected with security sector. Other specific university degrees requirements are mostly related to specific scientific field or group of different fields, and in just a few cases the concrete diploma in safety & security is required.



The majority of requirements for jobs and specific positions in security & safety area is related to specialized education, training, professional exams, and licensing.

4.2. Analysis of Study Programs in Safety & Security Area

For the analysis of the existing study programs in safety & security area, the *Guide through Accredited Institutions of Higher Education and Study Programs in the Republic of Serbia* was used, published regularly by the Commission for Accreditation and Quality Assurance³. The content analysis was conducted based on the set of keywords and expressions related to security and safety topics.⁴ This brief analysis showed the following results.

The existing study programs in safety & security vary in their scope, and the most common studies offered by universities, faculties and colleges could be summarized through the following list of topics covered by them:

1. Security Science/Studies and National Security
2. Defence Management and Military Studies
3. Police, Forensic and Internal Affairs Studies
4. Security Management, IT and Corporate Security
5. Emergency and Disaster Management and Fire Safety
6. Occupational Safety and Safety at Work
7. Environmental Protection and Ecology
8. Terrorism, Organized Crime and Political Violence
9. International Security/Politics, Peace and Diplomacy

The majority of the existing study programs in safety & security in Serbia are offered within three scientific fields, with some programs offered as interdisciplinary study programs:

1. Social Sciences and Humanities (32%)
2. Sciences and Mathematics (18%)
3. Technology and Engineering Sciences (41%)
4. Interdisciplinary programs (9%)

Existing study programs are offered on all higher education study cycles recognized by the Law on Higher Education and Accreditation Standards. There are academic study programs within universities and faculties. Also, there are professional/vocational study programs within universities, faculties and colleges of professional education.

³ Commission for Accreditation and Quality Assurance (February 9, 2018). *Guide through Accredited Institutions of Higher Education and Study Programs in the Republic of Serbia*. Available at: <http://www.kapk.org/en/home/> (Accessed on July 10th, 2018).

⁴ Security, safety, defence, military, police studies, internal affairs, protection, environment protection, ecology, workplace and health safety, occupational safety, fire protection, emergency management, risks, disasters, terrorism, political violence, organized crime, national security, information security, international security, corporate security, security management, criminalistics, forensics, peace studies, diplomacy.

Within the existing study programs, those related to safety & security area are offered through all four study cycles on both types of study (Table 2).

ACADEMIC STUDIES	PROFESSIONAL STUDIES
1. Bachelor Studies (25%)	1. Professional Career Studies (13%)
2. Master Studies (35%)	2. Vocational Studies (13%)
3. Professional Academic Studies (12%)	
4. Doctoral Studies (2%)	

Table 2. Overview of existing study programs in safety & security area in Serbia

Overall, 16 state faculties within six universities, offer programs in safety & security on all three study cycles.

4.4. Analysis of current undergraduate, MA, PhD, and professional study programs and courses on Safety & Security in partner countries

The preliminary research of programmes and courses in safety & security areas in Serbia, as well as in the consortium countries (Italy, Poland, Germany and France), was aimed at recognizing the key and mutual characteristics about their nature and to identify other significant information. As far as from the perspective of Serbian studies and courses with in S&S, specific goals are set to be achieved within this project task: Historical Overview, General Overview, Scope of Studies, Types and Cycles of Studies, Academic and Professional Studies, Serbian and English Studies and Distance Learning Studies. First, the courses of foreign consortium countries are presented.

Fact sheet 3. Key initial findings about the programmes & courses in foreign consortium countries

1. Impossible to list & index them under one single category;
2. Most of the Safety & Security courses:
 - are held at the MA level;
 - are held in English language; are in social science
 - lack of education of standards in curricula.
3. Very low number of joint programmes is implemented.

Even though, most of the individual courses offered by the project partner institutions are similar in terms of scope and curriculum, there is no high level of consistency within the programmes among the partners on one side, and the Serbian participants on the other



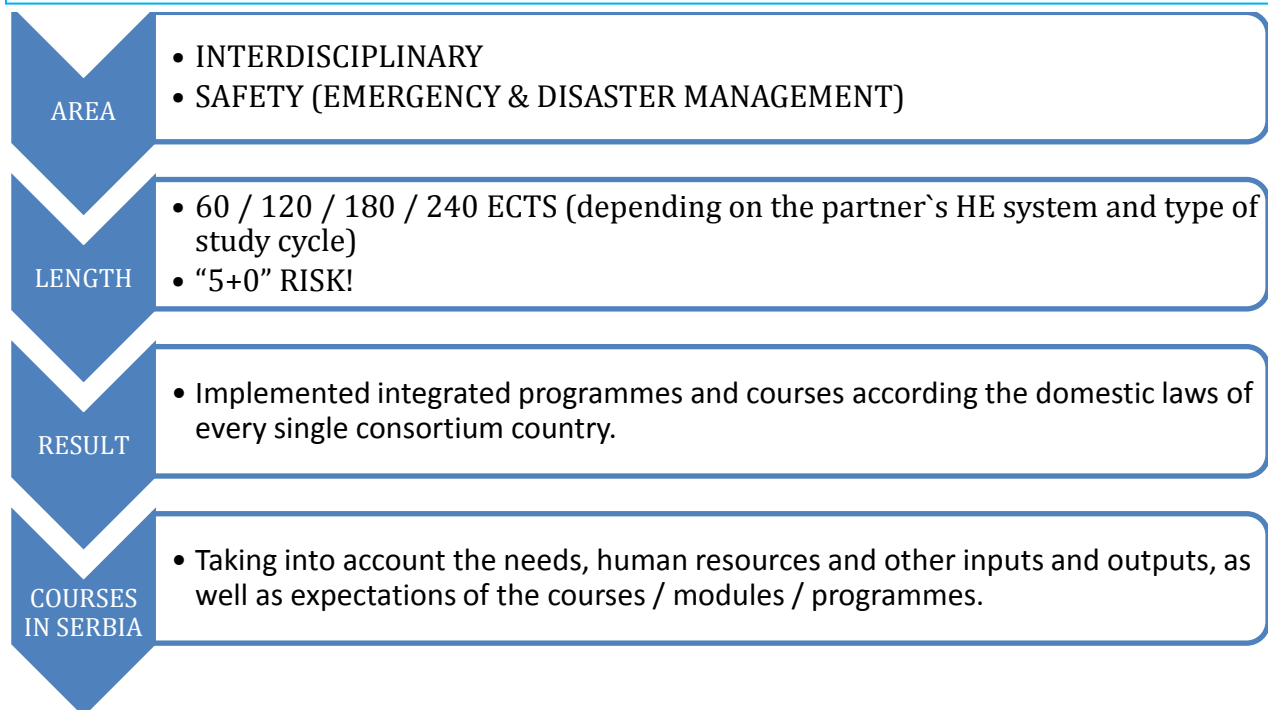
side. Afterwards, higher educational systems of the foreign consortium countries were analyzed.

In all countries HE systems are the same with minor variations, and consist of “3+2” system, whereas the first cycle of studies lasts for 3 years (Bachelor, 180ECTS), and the Master studies last for 2 years (120 ECTS).⁵

Next, the foreign countries programmes and courses are presented, identifying and introducing initial research outcomes for programmes in all four abovementioned countries.

Fact sheet 2. International Joint Study Programmes in Serbia

1. International joint programmes in Serbia are organized in the fields of social Sciences and humanities (social work, business law, European integrations, Quantitative finance), natural sciences and mathematics, interdisciplinary Studies (cultural policy and management).
2. There are **22 joint study programmes, with 15 partner institutions** (University of Innsbruck, University of Salzburg, University of Rome, University of Trieste, University of Zagreb, University of Lion, University of Gottingen...).
3. **THERE ARE NO JOINT SAFETY & SECURITY STUDIES.**
4. While there is none Doctoral joint studies at all, the distribution between joint MA and BA is as following: BA – 5%. MA – 95%.



⁵ The only variation from these systems are some medical and artistic schools that could last for 5,6 or 6 years.



5. MODEL OF BILATERAL & MULTILATERAL AGREEMENTS OF THE CONSORTIUM MEMBERS

Development of model of bilateral & multilateral agreements among the consortium members, is delivered by Dr. Mladen Milošević, an FSS ImprESS project team member. Dr. Milošević split his initial research outcomes in five characteristic types of agreements which should be further developed.

A. Multilateral Agreement between all the Consortium members:

- Should define a common willingness for formation of international knowledge union where Serbian universities would be users, and foreign partners would be mentors.
- The agreement would include the establishment of authorized Body for monitoring of fulfilment of agreement goals.
- The Body would adopt strategies and plans, and estimate the progress of Serbian universities.
- Foreign partners would take certain concrete obligations, such as provision of expert support in development of new study modules.

B. Multilateral agreement between local Consortium members commits for:

- strengthening the Knowledge Union,
- popularization and improvement of security studies,
- enhancement and placing new subjects and modules, for organizing joint conferences, seminars, roundtables etc.

C. Multilateral agreement between local members for the Knowledge Union:

Should set concretization of the Knowledge Union in several ways:

- Establishment of joint simulation and education centre (with author rights and software use rights) at the University of Defence,
- Arrangement on mutual recognition of courses and programs for diploma supplement,
- Arrangement on the exchange of professors.

D. Multilateral agreement between three and more local Consortium members

Multilateral agreement between three and more local Consortium members, should establish the cooperation in concrete areas of interest for multiple members, like:

- Agreement on using and maintaining the concrete software between merchandiser, purchaser, and Military Academy as the host of Simulation Center,
- Agreement between three or more local members on implementation of the course or module.

E. Bilateral Agreements

- Agreement between local member and software developing company
- Agreement on establishment and implementation of joint study programs of local members, or on partnership of one member within study program of other member, or on enrolment of professor from one member within study program of other member,
- Agreements with foreign partners on taking over programs and modules,
- Agreements on joint study program between local and foreign Consortium members.

The agreements are attached to this report in bilingual versions (English and Serbian).

6. MODEL

MODELING

“Scientific modelling is a scientific activity, the aim of which is to make a particular part or feature of the world easier to **understand, define, quantify, visualize, or simulate** by referencing it to existing⁶ and usually commonly accepted knowledge⁷. It requires selecting and identifying relevant aspects of a situation in the real world and then using different types of models for different aims, such as conceptual models to better understand, operational models to operationalize, mathematical models to quantify, and graphical models to visualize the subject. Modelling is an essential and inseparable part of many scientific disciplines, each of which have their own ideas about specific types of modelling.”

“A scientific model seeks to represent empirical objects, phenomena, and physical processes in a logical and objective way. All models are in simulacra, that is, simplified reflections of reality that, despite being approximations, can be extremely useful.”⁸ Within modelling and simulation, a model is a task-driven, purposeful simplification and abstraction of a perception of reality, shaped by physical, legal, and cognitive constraints⁹. It is task-driven, because a model is captured with a certain question or task in mind. Simplifications leave all the known and observed entities and their relation out that are not important for the task. Abstraction aggregates information that is important, but not needed in the same detail as the object of interest. Both activities, simplification and abstraction, are done purposefully. However, they are done based on a perception of reality. This perception is already a model in itself, as it comes with a physical constraint. There are also constraints on what we are able to legally observe with our current tools and methods, and cognitive constraints which limit what we are able to explain with our current theories. This model comprises the concepts, their behavior, and their relations in formal form and is

⁶ Cartwright, Nancy. 1983. *How the Laws of Physics Lie*. Oxford University Press

⁷ Hacking, Ian. 1983. *Representing and Intervening. Introductory Topics in the Philosophy of Natural Science*. Cambridge University Press

⁸ Box, George E.P. & Draper, N.R. (1987). *[Empirical Model-Building and Response Surfaces.]* Wiley. p. 424

⁹ Tolk, A. (2015). *Learning something right from models that are wrong – Epistemology of Simulation*. In Yilmaz, L. (Ed.) *Concepts and Methodologies in Modeling and Simulation*. Springer-Verlag. pp. 87–106

often referred to as a conceptual model. Conceptual models are often abstractions of things in the real world whether physical or social. The term *conceptual model* is normal. It could mean "a model of concept" or it could mean "a model that is conceptual." A distinction can be made between *what models are* and *what models are models of*.

Models are, mostly, intended to be models of real world states of affairs. The value of a model is usually directly proportional to how well it corresponds to a past, present, future, actual or potential state of affairs. A model of a concept is quite different because in order to be a good model it need not have this real world correspondence. Conceptual modeling is the activity of formally describing some aspects of the physical and social world around us for the purposes of understanding and communication.

Model, when implemented properly, should satisfy four fundamental objectives¹⁰:

- Enhance an individual's understanding of the representative system
- Facilitate efficient conveyance of system details between stakeholders
- Provide a point of reference for system designers to extract system specifications
- Document the system for future reference and provide a means for collaboration

THE MODEL

The model should present a solid basis for further work on overall ImprESS project and should represent pathway for establishment of the "knowledge and skills alliance" in the current state of affairs. In accordance with the Project task, this Model includes universities bilateral/multilateral contracts, joint accreditations, establishing a new role of faculty innovation centres as a course providers etc.

Agreement patterns and forms are developed to fulfil requirements and to be in accordance with national and EU law. The model can be applicable in Europe and Region-wide (Dissemination, ensuring sustainability of it).

In this case so called Simuland is: Higher Educational System (Serbian and EU). Requirements to the model are:

- To allow joint development and execution of study programmes or modules between Serbian and Serbian and EU partners.
- To innovate and create new study programmes, modules, courses and trainings
- To define shortcomings and limitations
- To allow implementation / to be executable.

¹⁰ C.H. Kung, A. Solvberg, *Activity Modeling and Behavior Modeling*, In: T. Ollie, H. Sol, A. Verrjin-Stuart, *Proceedings of the IFIP WG 8.1 working conference on comparative review of information systems design methodologies: improving the practice*. North-Holland, Amsterdam (1986), pp. 145–71



- To give possibilities for exchange of lecturers and students in Serbia and between Serbia and EU.
- Allow permanent joint curricula development and exchange of training materials and information.

Assumptions concerning this model:

- It is possible to form "knowledge and sector skill alliance" between HEI from program and partner countries.
- Dual diploma and joint study programs are possible
- Legal framework and instruments can be developed

Risks concerning this model:

- Accreditation process can be too long
 - Legal issues cannot be resolved
-

Validation would be done through fulfilment of requirements and Verification through implementation of the model. The event-driven process chain (EPC) or Logico-linguistic modeling are the possible conceptual modeling techniques as well as graphical representations of the explored system. The Model is represented in two figures, 1 and 2. First figure represents model of the Serbian educational system. It is clear from the graphical representation of the system that there are three separate branches when it comes to HES or more precisely tertiary education.

First one describes paths (bottom up) and possible branches in academic education. Second one represents paths for professional and vocational studies. These two branches are not interchangeable for students according to the 2017. HE Low. It is important to notice that there are no legal constraints on joint cooperation and joint programmes between any type of HSE both foreign and domestic for all types of studies. Important branch are courses which can be with or without ESPB. Up to now there was rear use of courses as a part or supplement of some subjects in other programmes or subjects in particular. This is an area with huge potential especially in the field of S&S which requires a large number of professional courses prescribed by the field regulating laws.

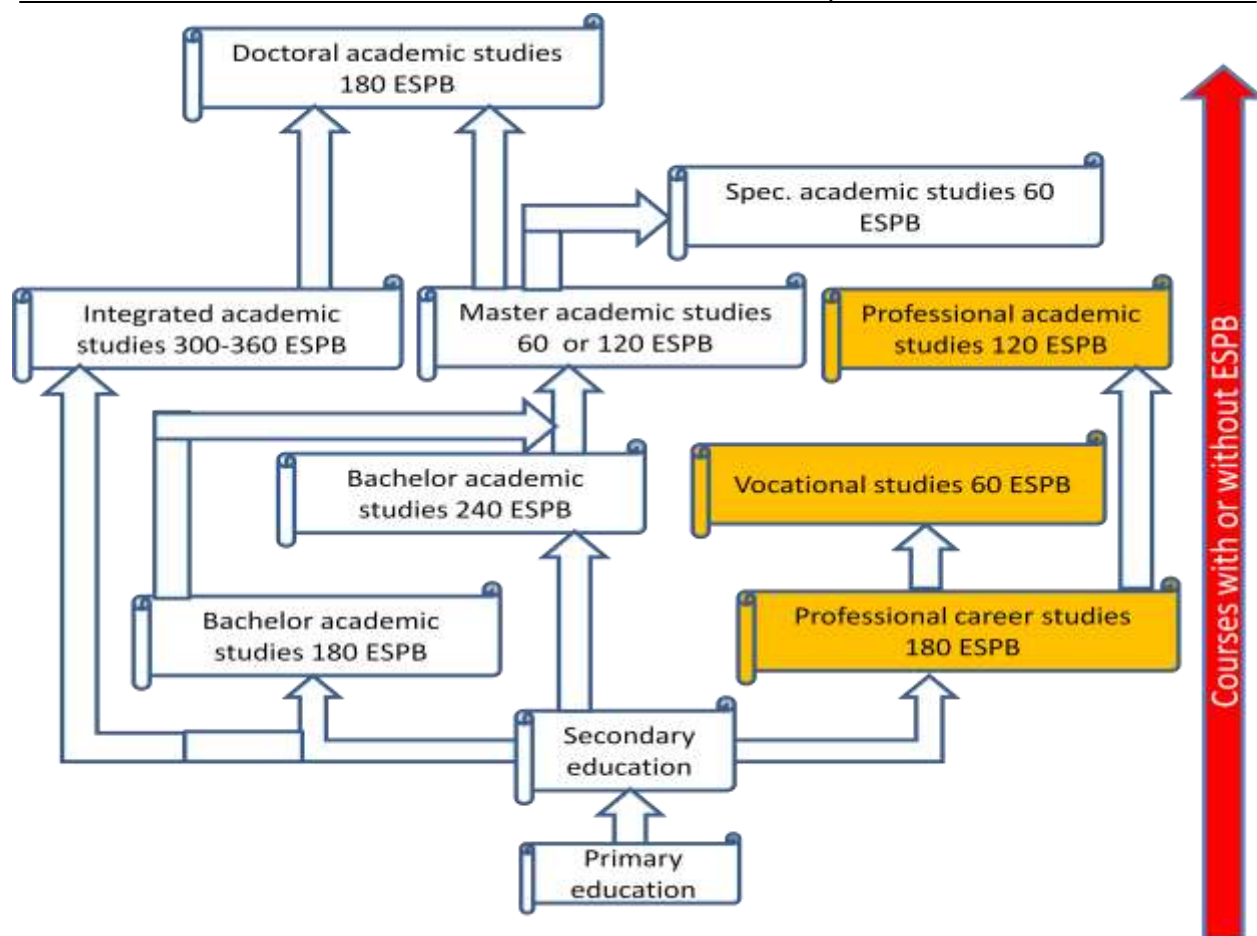


Figure 1. – Graphic model of Serbian educational system

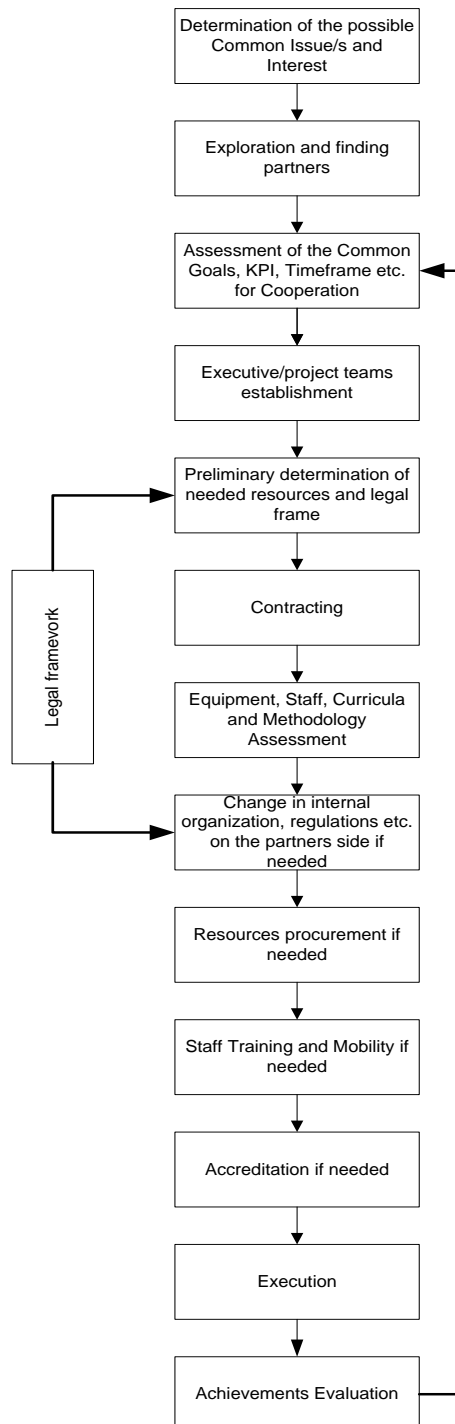


Figure 2. - Event-driven process chain representation of the model

Figure 2. gives the event-driven process chain representation of the model of the pathway for establishment of the “knowledge and skills alliance”. The modelled procedure should be followed in the cases of establishment of new or improvements of existing “knowledge and skills alliances”. For the establishment of a “knowledge and skills alliance” determination of the possible Common Issue/s and Interest is necessary first step. Search for adequate partners is the next step. Partners should be able to give complementary adds to the mutual goal. Partners should assess common goals, KPIs, timeframe etc. for possible cooperation. This is needed because of management of prerequisites and expectations.

Executive/project teams establishment is the necessary step for the preparation of the following steps. There is a lot of time consuming and skills/competence requiring tasks to be fulfilled. Preliminary determination of needed resources and legal frame are needed for as much as possible precise determination on the contract provisions, budgetary, time and other needs. Contracting is the necessary phase in which formal structure is to be established. After contracting, precise equipment, staff, curricula and methodology assessment is required for identification of the gaps and project organization establishment.

Sometime changes in internal organization, regulations etc. on the partners side is needed. Regulations change is needed to allow new form of actions or similar. New organizational forms are needed to execute new endeavor in a form of project or similar.

These changes will desirable lead to increase of similarity among partners where partners with lower level of development have ability to advance. Resources procurement in terms of equipment, staff, room etc. is needed to fulfill requirements of the new tasks.



New study programs or the change in the existing ones requires accreditation or another form of approval. Only after that execution of the agreed is possible. To assure evergreening and continuous development of the established “knowledge and skills alliance” performance analyses is needed and feedback action with the purpose to change the “lagging behind”. It is very important to stress that everything has to be done in accordance with the existing legal framework. The latest does not exclude efforts to change regulations when it is inevitable. On the basis of this model, a sample of educational infrastructure (curriculum, modules, courses, academic and para-academic educational activities) are to be established and implemented in Serbia (WP3). Once established, the infrastructure will be used to improve the current educational capacity of the participating universities in Serbia (WP4).

7. CONCLUDING REMARKS AND FINALIZATION OF THE WORK ON WP2

Stuttgart University (SU), Steinbeis University Berlin (SHB) as associate partners, along with the other Serbian participants, took an active participation also, within the WP2 tasks, especially in involving into analyses of the EU higher education legislation. This Model includes universities` bilateral contracts, joint accreditations, establishing a new role of faculty innovation centres as a course providers etc. Other Serbian partners will work on the results dissemination and “Regional Safety & Security Network” development.

The FSS ImprESS project team members shall continuously work on identifying new courses, study programmes, EU and Serbian legislation in HE area, and simultaneously will work on their analyses. In this context, continuous feedback is an important process for all the partners, in order to provide a basis for improvement the final results and outcomes of the WP2.

Even though this final workshop has presented the very last step of the project activities within the Working Package 2, the FSS UB project team shall continuously work for the further analyses on these issues, as it will present a great asset and the benefit for the project as a whole. The beta version of the Final Report from the WP2 shall be delivered by the end of 2018, as foreseen by the Project timeline.

Fin.
5TH NOVEMBER, 2018