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Project: Boosting the telecommunications engineer profile to meet modern society and industry needs [BENEFIT]

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1. Introduction

The deliverable D5.6 “Reports on stakeholders reached beyond the project consortium” reports the list and description of all parties beyond the project consortium members who have been in contact with project activities during the project implementation. No specific monitoring task has been assigned to this deliverable therefore any activities with a wider documented reachout of the project are reported here. The appraisal of the stakeholder reachout foreseen as Milestone 5.7 has been made by gathering information from organisers of BENEFIT public events and by collection information about appearance of project results in public and social media.

The main inputs to this report are

- web catalogue of industry capacities and companies in the WB region (T2.4).
- training and internship activities related to local industry (T4.3)
- documented participation of industrial partners in open events
- appearance in public and social media

The relationships with WP tasks are shown in Fig. 1.

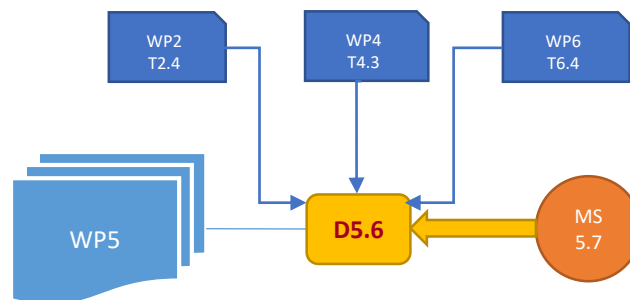


Figure 1. *D5.6 among other WP tasks and contributions to the project goals*

The deliverable D5.6 is organized in four sections. After the Introduction with relations to other WPs and contributions to the main project goals, the Section 2 describes the objectives of the deliverable D5.6. The Section 3 gives the categorized core report on stakeholders reachout, covering documented reachout via public events, appearance in public media, appearance in social media and through appearance of tentative stakeholders in industrial web catalogue. The summary and main conclusions are drawn in the Section 4. The last Section 5 contains the list of references.

2. Objectives of the Deliverable

The main objectives of the deliverable are to identify and to report the number and reference to stakeholders reached through the project, emphasizing on the persons and companies that were not among the initial project partners. Qualitative and quantitative indicators represent a metrics of project success and are indirectly or directly related to main project goals. The reported Indicators are bound to attractiveness and attention received by the regional industry regarding project activities.

The Deliverable will also bring forward a list of tentative industrial partners which are open for future student-industry-academia partnership regarding curriculum development, internships, graduate theses and career development.

3. Project reach out to stakeholders beyond the project consortium

3.1. Public events

1. ICT Day 2018, Ljubljana

The project Benefit was presented by prof. dr. Matej Zajc at the ICT day on May 16th at University of Ljubljana, Faculty of Electrical Engineering, in front of more than 50 students, faculty and invited industry. Link on Slovenian press agency [1].

2. Inksikt 2018, Tuzla

The event was held on 21-22 May 2018. InTsikt is an annual event with a focus on latest achievements in information and communication technologies. It is plenary organized and focused on knowledge and experience exchange between academia and industry. The topic of InTsikt 2018 was "Bridging Digital Divide". InTsikt is prepared and organized by Faculty of Electrical Engineering Tuzla, Faculty of Electrical Engineering Ljubljana and BIT Center Tuzla, and technically sponsored by IEEE Section of Bosnia and Herzegovina. Total number of participants at InTsikt 2018 is 70.

In the scope of the first day program, prof. dr. Matej Zajc from University of Ljubljana presented general aims of project BENEFIT. The special session with the title "Education of modern telecommunications engineers: project BENEFIT" was organized on May 22, 2018 and included the following presentations:

"Introduction to project BENEFIT: overview and basic facts", mr. sc. Davide Righini, Alpe Adria University, Klagenfurt, Austria

"Profile of modern telecommunication engineer from industry perspective in Western Balkan Region", Prof. dr. Dejan Vukobratović, University of Novi Sad, Serbia

"Guidelines for modernization of telecommunication engineering Curricula", Prof. dr. Matej Zajc, University of Ljubljana, Slovenia

"Student internships and trainings in BENEFIT", Prof. dr. Mladen Koprivica, University of Belgrade, Serbia "Internship opportunities for ICT engineers in Bosnia and Herzegovina", mr. sc. Seudin Kasumović, Bicom, Tuzla, Bosnia and Herzegovina

Students of University of Tuzla expressed their interest for the project, and had opportunity to exchange impressions with professors from partner universities. Television of Tuzla Canton and RTV 7 reported about this event. During InTsikt, University of Tuzla (UNTZ) and Faculty of Electrical Engineering and Computer Science in Osijek (FERIT) signed joint Memorandum of collaboration with the company AV Living Lab Ljubljana, Slovenia in the domain of autonomous vehicles.

3. Open event, Ljubljana, 2018

On 26 September an open event was organised in Ljubljana whose title was "Boosting the telecommunications engineer profile to meet modern society and industry needs – BENEFIT" Program:

- prof. dr. Matej Zajc, Univerza v Ljubljani: Erasmus + BENEFIT Open Day – Short introduction
- prof. dr. Andrea Tonello, University of Klagenfurt: BENEFIT – Boosting the telecommunications engineer profile to meet modern society and industry needs – short project overview
- Maja Dizdarević, Karierni center Univerze v Ljubljani: (R)evolution of new graduates for Industry 4.0
- Andreja Lampe, Gospodarska Zbornica Slovenije: ICT competence development @ Chamber of Commerce and Industry of Slovenia
- Gašper Podobnik, Predsednik ŠSFE, Domen Kodrič, ŠSFE, Student council as a bidirectional feedback loop between students and the faculty

- Larisa Grizilo, A1: Engage millennials with (digital) carrot or (digital) stick or (digital) something else?
- izr. prof. dr. Darko Huljениć, Ericsson Nikola Tesla, Ericsson Nikola Tesla Summer Camp – experience and challenges

Short presentations were followed by open discussion.

4. Presentation of BENEFIT to Western Balkan educational representatives, Ljubljana 2019

On 22.1.2019 a delegation from Kosovo, representatives from University of Priština together with vice-dean prof. Mimoza Ibrani as well as representatives from UBT prof. Naim Preniqi, all together 8 guests, visited University of Ljubljana, Faculty of Electrical Engineering.

Project activities were presented by dr. Matej Zajc and dr. Urban Burnik.

Guests expressed great interest in Benefit project and reported that they follow our work. Contacts for future collaboration were established.

5. ICT4Industry trade fair, Ljubljana, 2019.

In the days February 12 – 14, project BENEFIT has been presented on exhibition booth of Department of ICT at University of Ljubljana, Faculty of Electrical Engineering. With the exhibition, we were disseminating the efforts of BENEFIT project among the industrial partners in the region. We have collected positive responses and comments, which will be a valuable addition to further development of ICT courses under the project.

6. Cisco public seminar, 2019

Public Seminar on Cloud Computing Research and Teaching – Collaboration Tools in Education Within the framework of the Project BENEFIT, “Seminar on cloud computing research and teaching – collaboration tools in education” will be organized on March 13th 2019, from 11 a.m. to 1 p.m.

Agenda and topics covered

- Challenges in modern education and research
- Use of online collaboration tools in education
- Practical case studies

Seminar was organised for live and online access.

7. NES Open Lab – University of Klagenfurt, 2019

The Institute of Networked and Embedded Systems was hosting an OpenLab evening on March 13th at 5pm in the Lakeside Park in B04a, Klagenfurt, Austria. Students have presented exciting projects to give an insight into our student work and research fields. Project Benefit was presented to all visitors.

https://www.project-benefit.eu/wp-content/uploads/2019/03/openlab2019_AdvertisementFlyer-temp4.pdf

8. ZINC 2019

The international conference ZINC Zooming Innovation in Consumer Electronics 2019 was held on May 29-30, 2019 in Novi Sad, Serbia [2]. The event was hosted by the RT-RK Institute for Computer Systems Novi Sad, R&D companies and the National Research Institute, which are firmly linked to the University of Novi Sad. Conference events included symposia, forums, seminars, talks, workshops, guides, product and prototype demonstrations, for researchers and engineers from academia and industry to share experiences and results in their recent work. This included, but was not limited to, all members of academia and industry active in the fields of electronics, software engineering, hardware design, consumer applications and devices, new services and platforms, communications and connectivity, and various technologies that enable interdisciplinary forms of research with customer benefit.

During ZINC 2019, RT-RK and the University of Novi Sad two student seminars were organized in accordance with the planned goals of the BENEFIT project. The topics of the seminar were automotive communication, digital image and video processing in automotive systems and the Central Audio Library of the University of Novi Sad as a new teaching and learning methodology. These seminars distributed information about the BENEFIT project to their interested conference audience.

9. InTsikt 2019

InTsikt 2019 was a seminar organised on June 10-11th, 2019 in Tuzla. It was plenary organized and focused on knowledge and experience exchange between academia and industry. The topic of InTsikt 2019 was "Career Opportunities in Information Communication Technology Engineering". A special session was dedicated to BENEFIT project. InTsikt is prepared and organized by Faculty of Electrical Engineering Tuzla, Faculty of Electrical Engineering Ljubljana and BIT Center Tuzla, and technically sponsored by IEEE Section of Bosnia and Herzegovina. A regional TV report is available on YouTube <https://www.youtube.com/watch?v=WXazbprh-uA>.

10. Open event - panel conference in Sarajevo, 2019

A panel conference "Improving cooperation between the industry and academia in telecommunications" was organized by the Faculty of Electrical Engineering, University of Sarajevo on 12 June 2019. It brought together lecturers from the industrial sector and academia from Bosnia and Herzegovina and the region with the aim of presenting, identifying and defining ways of strengthening industrial-university cooperation in the field of telecommunications.

The gathering was opened by Prof. Dr. Aida Hodžić, Vice-Chancellor for Teaching and Student Affairs at the University of Sarajevo, emphasizing that gatherings, exchange of experiences, precise cooperation and joint action of the industry and academic sector is one of the strategic goals of the University of Sarajevo with the aim of improving both higher education and labour market, especially locally.

The aim of the conference was to present engineering profession to future students as more attractive and interesting, as it became deficient, stated Prof. Dr. Miralem Mehić, the Faculty of Electrical Engineering, UNSA.

He also pointed out that the conference was organized within Erasmus+ project "Strengthening the profiles of telecommunications engineers in order to meet the needs of modern society and industry" – BENEFIT funded by the European Union, and that representatives of telecom operators and faculty of telecommunications from the region took part in the conference.

At the Open Event Jasmina Baraković Husić (BH Telecom, Department for Planning and Development of Technologies and Services) provided a talk "Cooperation of BH Telecom with higher education institutions"

Representatives from the following companies attended the meeting:

- Communications Regulatory Agency of Bosnia and Herzegovina (<https://www.rak.ba/en/>)
- BH Telecom, Sarajevo (<https://www.bhtelecom.ba/>)
- Roaming Networks, Banja Luka (<https://www.roamingnetworks.com/?lang=en>)
- Infobip, Sarajevo (<https://www.infobip.com/>)
- Ericsson, Sarajevo (<https://www.ericsson.com/en/about-us/company-facts/ericsson-worldwide/bosnia-herzegovina>)
- Lanaco, Banja Luka (<https://www.lanaco.com/en/lanaco-information-technology/>)
- Unis Telekom, Mostar (<https://unistelekom.ba/en/>)

11. Webinar UNI 2019

Within the framework of the Project BENEFIT, the Webinar “Study Programs of Telecommunications” was held on September 5th 2019, from 12 a.m. to 1:45 p.m. at the Faculty of Electronic Engineering, University of Niš. The webinar was devoted to the Telecommunication study programs at the Faculty of Electronic Engineering, University of Niš (FEE-UNI).

All project partners, students and general public were invited to participate and distribute information about the webinar. Participants had possibility to participate online or at the Faculty of Electronic Engineering. Webinar is recorded and available to wide auditorium on <https://www.project-benefit.eu> and <https://youtu.be/QwoyjsNABc0>

12. Training Workshop in Ljubljana, 2019

Erasmus+ BENEFIT workshop on new teaching methodologies and instructional approaches in #ICT engineering education with emphasis on learning outcomes and competence development for engineering profession was held at University of Ljubljana on the 25th and 26th of September 2019. An intensive two day program included higher education experts: Klara Skubic Ermenc, Marija Bozic, Judita Peterlin, Marko Radovan, Borut Mikulec, Nina Vombergar and the BENEFIT team. The workshop participants were educators from ICT and telecommunication departments of: University of Belgrade, University of Novi Sad, University of Niš, University of Tuzla, University of Banja Luka, University of Sarajevo, University of Osijek, University of Klagenfurt and University of Ljubljana.

13. Regional Cluster Meeting “CBHE projects’ impact in the Western Balkans”, Durres, Albania, 2019

The Regional Cluster Meeting “CBHE projects’ impact in the Western Balkans” was held on 22 & 23 October 2019 in Durres, Albania [3]. It was organized by the EACEA, EAC and the NEO Albania in the framework of the CBHE action of the Erasmus + programme. Its aims are bringing together local stakeholders from the Higher Education (HE) sector as well as CBHE projects implemented in Western Balkans (WB) in order to:

- Discuss the impact of EU funded projects/programmes on the WB HE sector in terms of regional cooperation, modernization, accessibility, and internationalization of the HE;
- Provide local/regional visibility to the E+ programme and its funded projects, thereby contributing to maximizing their impact;
- Facilitate exchanges of good practice, sharing of knowledge and networking of CBHE projects to enhance their quality, impact and sustainability;
- Reflect on the actual needs of the HE sector in WB and on the way the future EU education programme for 2021-2027 could address these needs.

Prof. Daniela M. Milović, has participated at the meeting as representative of BENEFIT.

14. TELSIS 2019

The Project BENEFIT was presented and announced during the 14th International Conference on Advanced Technologies, Systems and Services in Telecommunications - TELSIS 2019 that was held at the Faculty of Electronic Engineering on 23. - 25. October 2019 [4]. Within the programmes of these event there were not special sessions dedicated to the Project BENEFIT but some dissemination was done by using BENEFIT materials. At the Conference TELSIS 90 papers were accepted and represented within the special, regular and poster sessions. Additionally, the events such as IEEE MTT-S Distinguished Microwave Lecturer Talk, Women in Engineering Meeting, Serbian Cable Operators-Steering board meeting (PUKOS), CEEPUS (Central European Exchange Programme for University Studies) Meeting and Panel The Role of Telecommunications in Development of Smart Cities were held during the conference time. It should point out participation of over 300 experts in the conference and accompanying professional events and meetings.

At the same time, as a part of TELSIS conference, the Forum of Advance technology was held in Nis in organization of Chamber of Commers and Niš Cluster of Advance Technologies-NiCAT. The Forum brought together all stakeholders in the field of advanced technologies and the special workshop of employment and professional orientations and workshop of education were held during the Forum. Also, to promote economic, scientific-educational, institutional and human resources of in the field of electronics, mechanical engineering and information and communication technologies Science technology park was open including some exhibition events. At the Forum of Advance Technology took part and visited more than 1000 people. The project BENEFIT was advertised among the conference and Forum participants, who came all over the world, and also by the project dissemination material such as roll-ups sited on the conference venue. Television of Serbia reported about these events. Accordingly, A lot of people from form Academic society, industry, business and economy world were present at the TELSIS conference and had an opportunity to meet with the BENEFIT project concept.

15. Project Meeting and training event in Osijek (CRO), 2019

On November 4th and 5th, 2019, the Faculty of Electrical Engineering, Computer Science and Information Technology of the Josip Juraj Strossamyer University of Osijek hosted the annual physical project meeting of the Erasmus+ Project BENEFIT. During this meeting the different work package leaders and members gave insights into their completed, current and future tasks in order to update the whole consortium about the overall progress of the project. The last session of the second day included the intervention of the EACEA project officer via teleconference, who provided precious feedback and advice.

The local newspaper "Glas Slavonije" reported on the training event:

https://www.project-benefit.eu/wp-content/uploads/2020/03/Glas-Slavonije_-Friday-December-13-2019.png

16. TELFOR 2019

27th Telecommunications Forum held on 27th to 28th November 2019. in Belgrade, Serbia is organized as an international meeting of those professionals working in the broad fields of Telecommunications and Information Technologies [5]. The work of Telecommunications forum TELFOR is organized through: Plenary and Authors' sessions, Students' sessions, Special technical and development presentations of the leading international and domestic telecommunications companies and societies, New books presentations, Seminars for experienced experts, Tutorials for young engineers and students, Exhibition of the communications hardware, software, equipment, systems and services, Commercial presentations of the companies and their products, Thematic debates, panel discussions and round tables on current issues, Social meetings, etc. TELFOR regularly has a high number of participants, both individuals and companies telecommunications' professionals in Serbia and region, around 2000 registered attendees. The greatest participating international telecommunications companies involved in TELFOR are Agilent, Alcatel, Cisco, Ericsson, HP, Huawei, IBM, Intracom, Juniper, Microsoft, Motorola, Rohde & Schwarz, Siemens, etc., together with their local partners, as well as around 50 other domestic and international supporting organizations.

Panel session "Boosting the telecommunications engineer profile to meet modern society and industry needs" devoted to results of ERASMUS+ KA2 project BENEFIT was organized on second day of conference. The presentation Dual Education in Higher Education of Serbia related to another ERASMUS+ KA2 project DualEdu (<https://dualedu.ef.uns.ac.rs/>) and presented by representatives who are out of project BENEFIT Consortium Prof. dr. Nenad Zrnić, Vice-rector, Faculty of Mechanical Engineering, University of Belgrade and Doc. dr. Žarko Mišković, Faculty of Mechanical Engineering, University of Belgrade. This panel session and it was open to all TELFOR participants who are mostly telecommunications engineers, but also the economists, jurists, managers, governmental officials, students, researchers, operators, service providers and others.

17. Teacher Training Seminar in Banja Luka, 2019

Within the framework of the Project BENEFIT, the teacher training seminar “Deep Learning in a Classroom” was held on 19th and 20th of December 2019, at the University of Banja Luka. Beside BENEFIT partners, there were several talks provided by guests:

- “Deep learning research: Biological Method (Bees) for Explosive Detection” – Nikola Kezic, HCR CTRO(Croatia), NATO project presentation
- “WB industry needs in machine learning” – Zoran Gajic, HOLOSCOPE company
- “Innovation starts with education: Bringing research into the curriculum” was given by prof. dr. Danilo Mandic, Imperial College, London

In addition Erasmus+ project “Vitalising ICT Relevance in Agriculture Learning – VIRAL” was presented.

18. Sarajevo, Teachers training event, July 15-16,2020

Teachers training event „Designing a Course for Stimulating Entrepreneurship in Higher Education“ was held at University of Sarajevo, and on July 16th, 2020. Nihad Borovina, (BH Telecom, Executive Director, Information Technology) delivered a training "Product-market Fit (PMF) concept adapted for teaching purposes"

19. Teacher Workshop at UNI 2020

Teacher training seminar “Role of software in education, research and practice”, held at the University of Niš, from 7th to 8th September 2020. at the Faculty of Electronic Engineering, University of Niš hosted participants from project partners institutions from Belgrade and Novi Sad, who were present at the Faculty, and also all other partners of the project BENEFIT (UNBL, UNTZ, UNSA, UNI-KLU, FERIT, UL) and industrial partners, who were connected online because of pandemic situation and restriction of traveling possibilities. The first day of Seminar was devoted to software tools that have been developed and applied at the FEE-UNI and NiCAT cluster, which is the UNI industrial partner on BENEFIT project. The presenter at the second day of Seminar was Prof. Branislav Gerazov external speaker who comes from Faculty of Electrical Engineering and Information Technologies, University of Skopje, Macedonia. His presentation was related to free software and Python. It should stress that Prof. Gerazov presentations as well as the presentations of other participants have reached out all interested in topics included into Seminar, not only from professionals and students from Consortium but also from the University of Skopje and from wider community. Additionally, we represented the video about the laboratory Machine to Machine Communications formed within project BENEFIT together with NiCAT our industrial partner, which can be found on YouTube channel, BENEFIT project Facebook, BENEFIT E-platform, FEE-UNI official site and facebook, as well as on FEE-UNI Telecommunication department web site. All listed social media are available to wide population and are open to everybody who is interested.

20. Webinar UB, 2020

Within the framework of the Project BENEFIT, the webinar on “Studying telecommunications engineering” at the School of Electrical Engineering, University of Belgrade was held on October 13th, 2020, from 12 a.m. to 1:45 p.m. fully online, hosted by University of Belgrade – School of Electrical Engineering. All project partners and students were invited to participate and distribute information about the webinar. The webinar was devoted to the studies of Telecommunications Engineering at the School of Electrical Engineering, University of Belgrade (UB-ETF). The recording is available at <https://www.youtube.com/watch?v=FWmXlJLbnPo&feature=youtu.be>.

21. Opening the Faculty of Electronic Engineering, University of Niš laboratory building, 2020

The Prime Minister of the Republic of Serbia, Ana Brnabić, opened the Multipurpose Laboratory Lamella of the Electronic Faculty in Niš on 24th of November 2020. The part of

presented laboratory equipment available at the Faculty of Electronic Engineering that was presented during this event is from the project BENEFIT laboratory-Machine to Machine Communications-M2M Communications. Also, video recorded together with NiCAT industrial partner on project about laboratory M2M Communications was shown. Many national and local TV stations were informed about this event.

22. TELFOR and TREND 2020

The BENEFIT team members from all participating universities from Serbia have traditionally attended the annual Telecommunications Forum TELFOR, which takes place in Belgrade in November [6], as well as the annual national conference TREND (“Trends of development”), which takes place at Kopaonik in February [7]. Both events gather a large number of representatives from all domains of interest for the BENEFIT project, including representatives from academia – both teachers and students – as well as stakeholders from industry. Typically, between 300 and 500 thoroughly reviewed scientific and expert papers with 700-900 authors/co-authors are presented every year at TELFOR, while the number of papers presented at TREND is typically 100-200. While TELFOR is specifically dedicated to telecommunications, TREND is more generally oriented on education, which is why the information about the project BENEFIT and the dissemination of its results were continuously carried out at both events (most notably a keynote lecture at TREND 2019 entitled “Improvements of the telecommunication engineer profile according to the needs of modern society and industry”). It should also be noted that the 2021 edition of TREND is particularly oriented on the challenges of online education, having “Online Classes at Universities” as its principal topic and subtitle, which is in line with the focus of the BENEFIT project on innovative solutions in university education. Its previous editions (2019 and 2020) were entitled “Quality of Higher Education” and “Innovation in modern education”. One of the principal conclusions of the 2020 edition of TREND identifies the importance of practical work in the laboratory, citing it as “enabling verification of theoretical fundamentals, acquisition of experience in practical work in a range of areas, preparation for future scientific and research work.” Specifically, the Faculty of Technical Sciences in Novi Sad has been identified as an example of good practice where a number of companies from industry have provided valuable equipment used in modern industrial processes, and is now an integral part of regular academic studies. Good cooperation between academia and industry was identified as one of the prerequisites for improving the quality of education in different areas.

23. NiCAT online lectures, 2020

NiCAT cluster held an online lecture on Tuesday, December 15th, 2020, starting at 2:00 pm via Zoom platform, on the topic: How to achieve a successful career and what is the first step – the key elements of success. Lecture was given by Goran Mladenovic, director of NiCAT cluster with the goal of lecture was to learn what are the key elements of success, how to get to the first position, what are the basic competencies needed for career success, as well as how to successfully prepare for an interview. Lecture was attended by mainly the students but also many teachers were be online present. The presentation and video recording are available on BENEFIT confluence webpage.

On Monday, December 21, from 1 pm Serbian time onwards our industrial partner NiCAT held the second online lecture via Zoom on the topic: Business in the field of application of artificial intelligence and development of a team of cyber security analysts. The lectures were held by: Marko Smiljanić, CEO of NIRI Intelligent Computing who talked about doing business in the domain of artificial intelligence on the example of NIRI, and Aleksandar Milinčić, General Manager at RCMT IT Europe, who talked about the development of a team of cyber security analysts at RCMT IT Europe.

All presentations and video material relating to these lectures are available on BENEFIT confluence website and also on demand to NiCAT for wider auditorium.

24. ERK 2020

The ERK 2020 conference was held on September 21-22, 2020 in Congress Center Bernardin, Portorož, Slovenia [8]. The conference is organized by the IEEE Slovenia Section together with Faculty of Electrical Engineering University of Ljubljana and other Slovenian professional societies. The Conference is bilingual, with presentations in English and Slovenian. At the conference, the first section on Didactics organised on September 22 at 9AM was entirely dedicated to the results of BENEFIT project. The conference was accessible live and online.

25. InTsikt 2020

INTSIKT 2020 is an annual international symposium where industry, academia and government institutions exchange knowledge and experiences within the ICT domain. The symposium is traditionally organized by the Faculty of Electrical Engineering University of Tuzla, Faculty of Electrical Engineering, University of Ljubljana and BIT Center Tuzla. InTsikt 2020 has organised a special session that presented the final achievements of the ERASMUS+ project BENEFIT. Due to covid-19 pandemic, InTsikt 2020 was organized as on line event from the 16th to 17th of November 2020. All information about the symposium, program and details are available at <http://intsikt.ba>.

26. Open Event UNS 2021

Erasmus+ BENEFIT Open Day, University of Novi Sad, 29.1.2021.

- Results of BENEFIT project, Prof. dr Andrea Tonello and WP leaders
- Entrepreneurship in ICT in Western Balkan Countries, Prof. dr. Vojin Šenk
- Research trends at the Chair of Telecommunication and Signal processing, Prof. dr Dejan Vukobratović, prof. dr Dragana Bajović, prof. dr Tatjana Lončar Turukalo, prof. dr. Vlado Delić
- Presentation of student activities in IEEE competitions, Srđan Šobot, Tamara Todić.
- Presentation of incoming hackathon organized by UNS/FTS, Prof. dr Dejan Vukobratović, Prof. dr Milan Naradžić, MSc Srđan Šobot
- Promotion of STEM education in USA. Ivan Šeškar, Associate Director Winlab Rutgers University

For the reason of OpenDay 2021 event, M Koprivica contacted and informed Prof. dr Miloš Cvetanović, State Secretary in the Ministry of Trade, Tourism, and Telecommunications about the project BENEFIT and invited a representative of the Ministry to attend the Erasmus+ BENEFIT Open Day 2021; the event was later attended by representative Mr Milan Vojvodić. He also made a phone contact with the Mrs Snežana Zečević from the Belgrade Chamber of Commerce and invited their representatives to Erasmus+ BENEFIT Open Day 2021 (send also an email invitation), unfortunately they were unable to attend. He is also in contact with the Serbian Chamber of Engineers which was made aware of the BENEFIT actions.

3.2. Appearance in public media

Many reported events were also covered by local media and there is no need for double reporting. Apart from that, the following media appearance of BENEFIT project can be identified.

1. ITU BiH publication, 2018

The International Telecommunication Union (ITU) present the Digital Innovation Profile of Bosnia and Herzegovina with a mention of BENEFIT project [9].

3.3. Appearance in Social media

To raise public awareness of the BENEFIT project, disseminate results and share public project event invitations, we have launched a Facebook Education Website “Benefit Erasmus+ Project” at the address <https://www.facebook.com/Benefit-Erasmus-Project-104684454391822>. A total reachout of 7176 users has been achieved by January 2021. A total number of posts amounts to 27. The posts contain mostly photos from the project events.

A dedicated YouTube channel has been established to promote Erasmus+ BENEFIT project and to share the available programmes with a broad audience. The link to the channel is being shared via the official project website. A direct link to the video channel sharing extensive video resources can be accessed at the address <https://www.youtube.com/channel/UCY1zj5NhaUQbuFeMP3IRKyA>.

3.4. Companies listed in industrial web catalogue

As part of the strategy how to reach out to stakeholders beyond the project consortium, we have created an active web catalogue of industrial capacities and companies in the WB region [10]. The intention of the catalogue is to publish interest of specific ICT companies in the region with regards to internship possibilities and partnership in graduate theses. Up until January 2021 a total number of 33 companies who were not in partnership of the project at launch of the project. These companies are:

1. Zesium mobile d.o.o.
2. Schneider Electric DMS NS
3. Source Code d.o.o.
4. QualityCert
5. SAGA
6. LEFTOR
7. Marvelsoft
8. DSO GLOBUS
9. DSO GRADIENT
10. SoftConsulting s.p. Tuzla
11. COMVERSUM d.o.o. Tuzla
12. Infobip BH d.o.o.
13. IRVAS INTERNATIONAL LTD.
14. MORENA ENGINEERING
15. FAZI
16. EuroGenyx
17. Mihajlovic Soft
18. SMARTNET TECHNOLOGIES
19. NIRI INTELLIGENT COMPUTING
20. POGLED TELECOMMUNICATIONS
21. NAISSUS TECHNOLOGIES
22. ADVANCED SECURITY TECHNOLOGIES
23. ATOMIA
24. LOGIK BUSINESS SOLUTIONS
25. HOSTINGBUY
26. INGSOFTWARE
27. YOUNIFY
28. PRIME SOFTWARE
29. SHINDIRI STUDIO
30. BADIN SOFT

31. FUTURE FORWARD
32. RCMT IT Europe
33. DCLLOUD
34. DV POWER

4. Conclusions

As described in the deliverable, the main sources of wide project reachout beyond the members of the consortium was mainly achieved via public events (conferences, trade fairs, public project lectures and presentations), via appearance in public media, and by using a dedicated Facebook promotional page. An online catalogue of actively involved industrial partners available for student internship and graduate theses research has been set-up on the Erasmus-Benefit public website.

Here we can also remind that as a result of project activities, a complete set of teaching materials is openly available to teaching, research and industrial parties interested in project result via the project website. The materials include textbooks and laboratory assignment instructions. Most of the materials are written in one of the West-Balkan languages (Serbian, Bosnian, Croatian) which local students know well. This is a significant resource from which any student, academia or industrial member in the region can benefit far beyond the participating institutions.

The organisation of public events and the ability to personally contact representatives of public institutions and companies, who are interested in the BENEFIT project results and future cooperation were seriously affected by the Covid-19 pandemic. Certain BENEFIT events have been reorganised into online events and some actions had to be rescheduled or even postponed. Despite, we may safely claim that our project has reached an impressive level of publicity and recognition among the tentatively interested parties. We will continuously promote the positive results and keep trying to extend our network of project stakeholders in the future.

5. References

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