



Co-funded by the
Erasmus+ Programme
of the European Union



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

Project ID: 585716-EPP-1-2017-1-AT-EPPKA2-CBHE-JP

Work Package 1: Consolidation of ex-ante analysis and preparation of implementation actions

Title: D1.2 Consolidated project plan of implementation actions

Lead Organization: UNI-KLU

Participating Organization: UL, FERIT, UBL, UNSA, UNTZ, UB, UNI, UNS, ENT, BICOM, BIT, CISCO, NiCAT, RT-RK

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Deliverable data	Work Package and Outcome ref.no.	WP1 D1.2
	Title	Consolidated project plan of implementation actions
	Type	<input type="checkbox"/> Teaching material <input type="checkbox"/> Event <input type="checkbox"/> Learning material <input checked="" type="checkbox"/> Report <input type="checkbox"/> Training material <input type="checkbox"/> Service / Product
	Description	This deliverable presents a consolidated plan of all implementation actions to be performed during the project. This includes the development, dissemination and exploitation plans, the final project plan for the set, timing and responsibilities of all deliverables, and the final review of all project tasks assignments and responsibilities. The deliverable has been discussed and consolidated in the project meeting in Novi Sad at M6.
	Date	14/04/2018
	Language	English
Target groups	<input checked="" type="checkbox"/> Teaching staff <input type="checkbox"/> Students <input checked="" type="checkbox"/> Trainees <input checked="" type="checkbox"/> Administrative staff <input type="checkbox"/> Technical staff <input type="checkbox"/> Librarians <input checked="" type="checkbox"/> Industry partners, WB Higher education authorities	
Dissemination level	<input type="checkbox"/> Department / <input type="checkbox"/> Local <input type="checkbox"/> National Faculty <input type="checkbox"/> Institution <input type="checkbox"/> Regional <input checked="" type="checkbox"/> International	
Lead Organization	UNI-KLU	
Participating Organization	UL, FERIT, UBL, UNSA, UNTZ, UB, UNI, UNS, ENT, BICOM, BIT, CISCO, NiCAT, RT-RK	
Task	T1.3 Preparation of implementation actions (Task leader: UNI-KLU).	

Revision History				
Version	Date	Author(s)	Organization(s)	Brief description of change
1	23/3/2018	A. Tonello	UNI-KLU	Draft
2	14/4/2018	D. Righini	UNI-KLU	Revision
3	27/4/2018	A. Tonello	UNI-KLU	Revision
4	20/5/2018	D. Righini	UNI-KLU	Revision
5	3/7/2018	D. Righini	UNI-KLU	Revision
6	10/2/2021		Sinonim d.o.o.	Proofreading

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1 Introduction

This deliverable presents a consolidated plan of all implementation actions to be performed during the project. This includes the development, dissemination and exploitation plans, the final project plan for the set, timing and responsibilities of all deliverables, and the final review of all project tasks assignments and responsibilities.

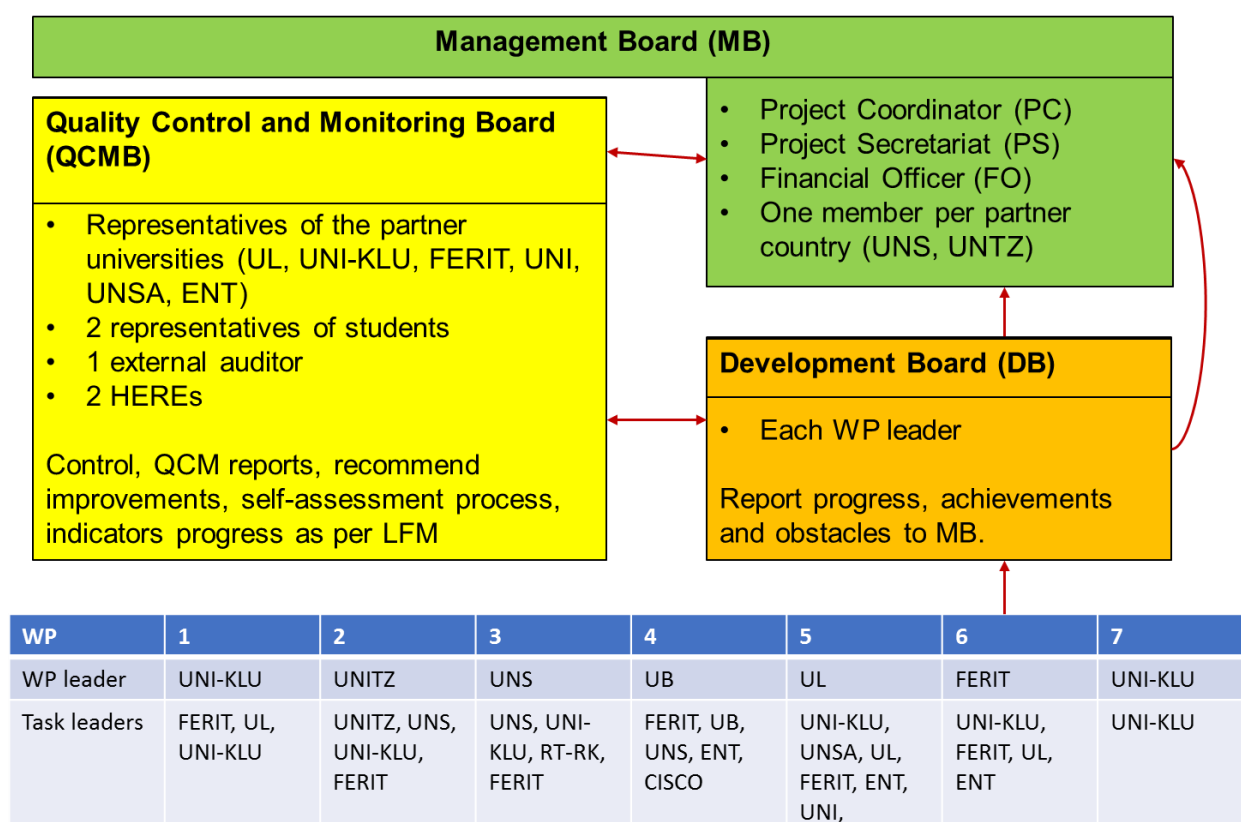
2 Objectives of the Deliverable

The following are the objectives of this deliverable:

- Report on the management structure of the project, with a list of responsible persons for each activity. The report also discusses policies and procedures.
- Briefly review WP activities, milestones and deliverables and planned dates.
- For each WP discuss the actions to be performed.
- Report the planned events and meetings.

3 Management structure and procedures

As a results of WP1 activities, the consortium has agreed coherently with the project proposal to the governance structure shown in the following figure.



In detail, the following persons have been appointed members of the boards.

Management Board (MB)

- Andrea Tonello (UNI-KLU) – PC
- Erika Tonso (UNI-KLU) – PS and FO ad-interim
- Vlado Delić (UNS)
- Nermin Suljanović (UNTZ)

Development Board (DB)

- Davide Righini (UNIKLU) – WP1 leader
- Aljo Mujčić (UNTZ) – WP2 leader
- Vlado Delić (UNS) – WP3 leader and DB leader
- Mladen Koprivica (UB) – WP4 leader
- Matej Zajc (UL) – WP5 leader
- Snježana Rimac Drlje (FERIT) – WP6 leader
- Andrea Tonello (UNI-KLU) – WP7 leader

Quality Control Board (QCB)

- Urban Burnik (UL) – QCB leader
- Dušanka Bošković (UNSA)
- Darko Huljenić (ENT)
- Francesco Marcuzzi (UNIKLU)
- Nataša P. Maleš-Ilić (UNI NIS)
- Drago Žagar (FERIT)
- External advisor member
- External HERE
- External HERE
- Student representative
- Student representative

3.1 Governance procedures

The governance procedures are detailed in the partnership agreement as well as in D7.2 of WP7.

The Project Management activities will be implemented in accordance with Work Package 7 of the submitted proposal through the tasks assigned to the Management Board (MB) and the Development Board (DB). The MB will be led by the coordinator's Project Manager (PM), and will include one representative per project partner country. The DB will be led by one project partner representative and will include the work packages leaders. The MB and DB members have been assigned during the kick-off meeting at Klagenfurt. The MB will form the primary decision making body of the partnership and is responsible for monitoring the project progress, the achievement of milestones and the delivery of planned results as well as for monitoring the financial aspects and the use of resources. To closely monitor the development activities, the MB will consult the DB. The DB will report the progress of activities, achievements and possible difficulties to the MB who will analyse the situation and eventually propose a contingency plan so that the project can make progress and achieve the planned goals.

The coordinator will coordinate closely with all beneficiaries to ensure that the project progresses efficiently. The coordinator's team will be led by the PM, and assisted by the Project Secretariat (PS), a Financial Officer (FO), the MB, and the DB.

The MB will have at least one face-to-face meeting per year, and eventually other meetings via teleconference. The DB is responsible for organizing more frequent meetings or conference calls to discuss development activities and report to the PM and MB especially if difficulties are encountered. Any extraordinary meetings called by the PM, or the MB or the DB may be held by teleconference or other telecommunication means.

The activity of the PM will be aided by the PS that will work on administrative and organization of activities as, distribute meeting minutes, maintain the project calendar, coordinate the exchange of information, coordinate the organization of meetings, seminars, workshops, plenary meetings and maintain the book keeping necessary for budgeting and financial activities, manage resolution of conflicts.

In accordance with WP5, a quality control management board (QCMB) has been formed and it comprises representatives of the partners participating in the project and by external auditors outside the consortium to follow up the quality and monitoring of the work packages and carry out inter-party peer review. The QCMB will review each project activity and will also report to the MB and DB the outcome of the evaluation, the identification of deficiencies, and delays so that the appropriate countermeasures can be taken. The QCMB leader will be responsible for organizing meetings of the QCMB also via teleconference, the preparation of the agenda and the delivery of minutes.

Any member of the MB or DB ("Member") should be present or represented at any meeting and may appoint a substitute or a proxy to attend and vote at any meeting, and shall participate in a cooperative manner in the meetings.

A Beneficiary that can show that its own allocated work, time for performance, costs, liabilities, intellectual property rights or other legitimate interests would be severely affected by a decision of the MB, may exercise a veto with respect to the corresponding decision. Each member of the MB/DB will have one vote.

An agenda will be drawn up by the PM, or PS, or assigned person, issued to each of the MB and DB meetings no later than 7 calendar days prior to the MB/DB meeting. During a meeting, the members of the MB/DB present or represented can take a majority vote in order to agree to add a new item to the original agenda. The MB/DB leaders, or the PS, or assigned person at the meeting, shall be responsible for organizing the minutes of the MB/DB and decisions will only be binding once the relevant part of the minutes has been accepted following the procedure:

- He/she shall send the draft minutes to all Members within 2 weeks of the meeting.
- The minutes shall be considered as accepted if, within 15 calendar days from sending, if no Member has sent an objection in writing to the PM or PS with respect to the accuracy of the draft of the minutes.

The MB will be responsible for managing any dispute in accordance with Article 16. The following decisions shall be made by the MB:

- Proposals for changes to be made to Annex I Description of the Action to be agreed by the Executive Agency;
- Withdrawal of a Party from the Project and approval of the settlement on the conditions of the withdrawal;
- Identification of a breach by a Party of its obligations under this Agreement or the Grant Agreement;
- Declaration of a Party to be a defaulting Party;
- Remedies to be performed by a defaulting Party;
- Termination of a defaulting Party's participation in the Project and measures relating thereto;
- Proposal to the Executive Agency for a change of the coordinator;
- Proposal to the Executive Agency for suspension of all or part of the Project;
- Proposal to the Executive Agency for termination of the Project and this Agreement.

The DB will be responsible for the coordination of project development, implementation and dissemination activities realization as described in the WPs 1 to 6. The DB shall:

- Support the coordinator in preparing meetings with the Executive Agency and in preparing related data and project deliverables relating to the tasks in WPs 1 to 6;
- Assist with the quality assurance audits in consultation with the QCMB;
- Prepare the content and timing of press releases and joint publications by the Partnership.

For the modernization of laboratories and teaching infrastructures, equipment will be purchased according to the approved project budget. The purchase of the equipment will take place in each partner country (Bosnia and Herzegovina, and Serbia) and will follow a centralized tendering

procedure, where one university in each country will be responsible to organize the tendering procedure. In particular, in Bosnia and Herzegovina, this will be the University of Tuzla, while in Serbia, it will be the University of Novi Sad.

4 Review of WP activities, milestones and deliverables

In this section we schematically report the WP activities, milestones, deliverables and planned delivery dates. Given the complexity of the project and the number of partners involved, the objective is to facilitate the understanding of the overall structure and main responsible organizations. This has been achieved starting from the project proposal and through the discussion among partners during the preparation phase done in WP1.

The WPs are the following:

- **WP1: Consolidation of ex-ante analysis and preparation of implementation actions**
- **WP2: University-enterprise cooperation and modernization of Telecommunications Engineering study programs**
- **WP3: Modernization of teaching methodologies and infrastructures**
- **WP4: Training and internship implementation**
- **WP5: Quality control and monitoring**
- **WP6: Dissemination and exploitation of project outcomes**
- **WP7: Project coordination and management**

WP1 will not be discussed in this deliverable since it can be considered concluded with D1.1 and this deliverable D1.2.

4.1 Time plan of work packages

The time line of the WPs is shown below.

WP1					
WP2					
WP3					
WP4					
WP5					
WP6					
WP7					
month 1-6	month 7-12	month 13-18	month 19-24	month 25-30	month 31-36

4.2 Tabulated summary of WPs, activities and deliverables

A visual summary of tasks, and deliverables is given in the tables below.

WP1: Consolidation of ex-ante analysis and preparation of implementation actions

Period		M1 – M6
Participating org. Leader UNI-KLU		UNI-KLU , UL, FERIT, UBL, UNSA, UNTZ, UB, UNI, UNS, ENT, BICOM, BIT, CISCO, NiCAT, RT-RK
Tasks	Task leader	Description
T1.1	FERIT	Survey and analysis of telecommunications engineering study programmes in relation to modern society and industry needs
T1.2	UL	Consolidate guidelines for curriculum modernization in cooperation with Industry
T1.3	UNI-KLU	Preparation of implementation actions
Deliv	Description	
D1.1	Consolidated ex-ante analysis and guidelines aimed at boosting the telecommunications engineer profile including a projection of needs for ICT engineers in the future.	
D1.2	Consolidated project plan of implementation actions	

WP2: University-enterprise cooperation and modernization of Telecom Engineering study programs

Period		M7 – M36
Participating org. Leader UNITZ		UNITZ , UNI-KLU, UL, FERIT, UBL, UNSA, UNTZ, UB, UNI, UNS, ENT, BICOM, BIT, CISCO, NiCAT, RT-RK, VOICT
Tasks	Task leader	Description
T2.1	UNITZ	Modernization of telecommunications engineering study programmes (within 1st and 2nd cycles) in 3 B&H and 3 Serbian HEIs in cooperation with ICT industry
T2.2	UNITZ, UNS	Delivery of courses in the modernized and accredited study programmes
T2.3	UNI-KLU	Creation and periodic update of web portal linking ICT study programmes and enrolment procedures
T2.4	FERIT	Creation and periodic update of web catalogue of industry capacities and companies in the WB region
Deliv	Description	
D2.1	Modernized and accredited study programmes in telecommunication engineering of 3 B&H and 3 Serbian universities in cooperation with ICT industry	
D2.2	Delivery of new study programmes and report on the study programme changes	
D2.3	Web portal linking ICT study programmes of both EU and WB universities and enrolment procedures	
D2.4	Web catalogue for long-term cooperation with ICT industry in the region	

WP3: Modernization of teaching methodologies and infrastructures

Period	M7 – M30
Participating org. Leader UNS	UNS , UNI-KLU, UL, FERIT, UBL, UNSA, UNTZ, UB, UNI, UNS, ENT, BICOM, BIT, CISCO, NiCAT, RT-RK

Tasks	Task leader	Description
T3.1	UNS	Adoption of new learning/teaching meth., tools, ICT best practices in teaching
T3.2	UNI-KLU	Creation of joint university-industry labs and modernization of the lab infrastructure
T3.3	RT-RK	Development of innovative training methods involving industry
T3.4	UNS	Development of learning/teaching methods based on student competitions, and development of student challenges and hackathons
T3.5	FERIT	Creation of web repository for class material and remote classes including audio-libraries

Deliv	Description
D3.1	Development of modernized teaching methodologies
D3.2	Creation of six joint university-company labs ruled by an agreement
D3.3	Collection of teaching material for new and modernized courses
D3.4	Web repository for class and lab sessions material, recorded remote classes and network of audio-libraries

WP4: Training and internship implementation

Period		M13 – M36
Participating org. Leader UB		<u>UB</u> , UL, FERIT, UBL, UNSA, UNTZ, UB, UNI, UNS, ENT, BICOM, BIT, CISCO, NiCAT, RT-RK, AN, SE-DMS, ZM
Tasks	Task leader	Description
T4.1	FERIT	Creation of web portal for training and internship opportunities
T4.2	UB	Implement framework for student training in cooperation with EU partners and industry
T4.3	UNS	Offer techno-economic, entrepreneurial and IPR related training modules
T4.4	ENT	Implement framework for support of student internships in companies
T4.5	CISCO	Implement teacher staff training on ICT teaching tools and lab operations and modern prototyping tools
Deliv	Description	
D4.1	Creation of training/internships Web Platform	
D4.2	Implementation of student training modules on technical and entrepreneurial subjects	
D4.3	Implementation of internships and co-supervised theses in industry	
D4.4	Implementation of teacher training modules	
D4.5	Surveys and reports on training/internship	

WP5: Quality control and monitoring

Period		M1 – M36
Participating org. Leader UL		<u>UL</u> , UNI-KLU, FERIT, UBL, UNSA, UNTZ, UB, UNI, UNS, ENT, BICOM, BIT, CISCO, NiCAT, RT-RK
Tasks	Task leader	Description
T5.1	UNI-KLU	Establishment of the QCM Board and appointment of an external expert for QC
T5.2	UNSA	Consolidation of areas to be monitored, indicators, and correction strategies both internal and external
T5.3	UL	Internal control of project progress and outcomes
T5.4	ENT	Monitor graduates profile, improvements in the skills, correspondence to industry needs
T5.5	FERIT	Collect questionnaires and surveys via social networks (LinkedIn, Angellist)
T5.6	UNI	Monitor student enrolment statistics in the region
T5.7	UL	Establish a monitoring system for employment statistics of graduates in telecommunications engineering

Deliv	Description
D5.1	Establishment of Quality Control (QC) board and appointment of external experts for QC
D5.2	Development of guidelines for QC
D5.3	Reports on project implementation
D5.4	Reports on graduates profile improvements and correspondence to industry needs
D5.5	Report on tools for monitoring students enrolment and employability/employment/entrepreneurial statistics of graduates
D5.6	Reports on stakeholders reached beyond the project consortium

WP6: Dissemination and exploitation of project outcomes

Period	M1 – M36
Participating org. Leader FERIT	FERIT , UNI-KLU, UL, UBL, UNSA, UNTZ, UB, UNI, UNS, ENT, BICOM, BIT, CISCO, NiCAT, RT-RK

Tasks	Task leader	Description
T6.1	UNI-KLU	Development of the project web site combined with the web platforms developed in the other WPs. Preparation of the materials to keep the project web site up to date with the current activities
T6.2	FERIT	Preparation of exploitation and dissemination plan
T6.3	UL	Create promotional and dissemination material targeting high schools' students and society at large
T6.4	ENT	Organize an annual open event outreaching a wide audience that includes public authorities, industry, students, pupils and non-expert people
T6.5	UNI-KLU	Organize a yearly event (hosted in turn by the HEIs partners) in the form of a webinar broadcasted to all locations to present the study programmes, tips on study engineering targeting enrolled and prospective students/pupils
T6.6	UL	Establish agreements for future double degrees, joint teaching, student mobility beyond the project duration, bilateral agreements within Erasmus+ KA1
T6.7	FERIT	Create an agreement for the maintenance of the web platform beyond the project life time
T6.8	UNI-KLU	Create partnerships for follow-up projects and H2020 funding for research projects on telecommunication engineering

Deliv	Description
D6.1	Central project web platform linked to the e-platforms developed in the other WPs
D6.2	Report on exploitation and dissemination plan
D6.3	Preparation and delivery of dissemination and informative material
D6.4	Offered open events to reach the community at-large and disseminate the results at ICT conferences
D6.5	Organization of an yearly webinar (hosted in turn by the HEIs partners) broadcasted to all locations
D6.6	Establishment of agreements for future double degrees, student mobility beyond the project duration
D6.7	Created an agreement for the maintenance of the web platforms beyond the project life time
D6.8	Created partnerships for follow-up projects and H2020 funding for research projects on telecommunication engineering involving industry

WP7: Project coordination and management

Period	M1 – M36
Participating org. Leader UNI-KLU	UNI-KLU , UL, FERIT, UBL, UNSA, UNTZ, UB, UNI, UNS, ENT, BICOM, BIT, CISCO, NiCAT, RT-RK

Tasks	Task leader	Description
T7.1	UNI-KLU	Creation of a project management (PM) board
T7.2	UNI-KLU	Creation of an e-platform for project management (e.g., wiki page)
T7.3	UNI-KLU	Monitor and coordinate the overall project
T7.4	UNI-KLU	Maintain flow of information between partners and the funding agency
T7.5	UNI-KLU	Organize regular meetings (face to face and remote)
T7.6	UNI-KLU	Monitor the financial aspects of the project, funding, and prepare the reports

Deliv	Description
D7.1	Report on the project management (PM) board and its establishment
D7.2	Report on the project management (PM) e-platform for sharing documentation
D7.3	Project meetings and progress/status reports
D7.4	Periodical reports on status between the project coordinator (PC) and the funding agency
D7.5	Delivery of financial reports

5 Consolidated actions within WP2-WP7

The consolidated actions within WP2-7 follow the proposal and have been agreed as summarized in the following table of tasks, deliverables, dates and indicators of progress. The GANTT of activities is reported in the appendix and can be found also in the Confluence system for the project management.

5.1 Tasks, deliverables, dates and indicators of progress

Task leader	Activity description	Outcome	Indicator	Task ID	Person in charge	Start date	End date
WP2					Nermin Suljanović		
P1: UNI-KLU	Manage task T2.3: Creation and periodic update of the web portal linking ICT study programmes and enrolment procedures	D2.3	M2.7, M2.8, M2.9	T2.3		15/04/2018	14/10/2020
P3: FERIT	Manage task T2.4: Creation and periodic update of the web catalogue of industry capacities and companies in the WB region	D2.4	M2.10, M2.11, M2.12	T2.4		15/04/2018	14/10/2020
P7: UNTZ	Manage task T2.1: Modernization of the telecommunications engineering study programmes (within 1st and 2nd cycles) in 3 B&H and 3 Serbian HEIs in cooperation with the ICT industry	D2.1	M2.1, M2.2, M2.3, M2.4	T2.1		15/04/2018	14/10/2019
P7: UNTZ	Manage task 2.2: Delivery of courses in the modernized and accredited study programmes for B&H	D2.2	M2.5, M2.6	T2.2		15/04/2018	14/10/2020
P10: UNS	Manage task 2.2: Delivery of courses in the modernized and accredited study programmes for B&H	D2.2	M2.5, M2.6	T2.2		15/04/2018	14/10/2020

Task leader	Activity description	Outcome	Indicator	Task ID	Person in charge	Start date	End date
WP3					Vlado Delić		
P1: UNI-KLU	Manage task T.3.2: Creation of joint university-industry labs and modernization of the lab infrastructure	D3.2	M3.4, M3.5, M3.6	T3.2		15/04/2018	14/04/2020
P3: FERIT	Manage task T.3.5: Creation of web repository for class material and remote classes including audio-libraries	D3.3, D3.4	M3.7, M3.10	T3.5		15/04/2018	14/10/2020
P10: UNS	Manage task T3.1: Adoption of new learning/teaching methods, tools, ICT best practices in teaching	D3.1	M3.1, M3.2, M3.3, M3.8, M3.9	T3.1		15/04/2018	14/04/2020
P10: UNS	Manage task T.3.4: Development of learning/teaching methods based on student competitions, and development of student challenges and hackathons	D3.2	M3.4, M3.5, M3.6, M3.8, M3.9	T3.4		15/04/2018	14/04/2020
P15: RT-RK	Manage task T.3.3: Development of innovative training methods involving industry	D3.2	M3.4, M3.5, M3.6	T3.3		15/04/2018	14/04/2020

Task leader	Activity description	Outcome	Indicator	Task ID	Person in charge	Start date	End date
WP4					Mladen Koprivica		
P3: FERIT	Manage task T4.1 Creation of web portal for training and internship opportunities	D4.1	M4.1	T4.1		15/04/2018	14/10/2020
P4: ENT	Manage task T4.4 Implement framework for support of student internships in companies	D4.2, D4.5		T4.4		15/04/2018	14/10/2020
P10: UNS	Manage task T4.3 Offer techno-economic, entrepreneurial and IPR related training modules	D4.2, D4.5	M4.2, M4.4, M4.5	T4.3		15/04/2018	14/10/2020
P13: CISCO	Manage task T4.5 Implement teacher staff training on ICT teaching tools and lab operations and modern prototyping tools	D4.4, D4.5	M4.6, M4.7, M4.8, M4.9	T4.5		15/04/2018	14/10/2020

Task leader	Activity description	Outcome	Indicator	Task ID	Person in charge	Start date	End date
WP 5					Matej Zajc		
P1: UNI-KLU	T5.1 Establishment of the QCM Board and appointment of an external expert for QC (1 QC expert and 2 external advisors)	D5.1	M5.1, M5.4	T5.1		15/10/2017	14/04/2018
P2: UL	T5.3 Internal control of project progress and outcomes	D5.3	M5.3, M5.5	T5.3		15/10/2017	14/10/2020
P2: UL	T5.7 Establish a monitoring system for employment statistics of graduates in telecommunications engineering	D5.5, D5.6, D5.4	M5.6	T5.7		15/10/2017	14/10/2020
P3: FERIT	T5.5 Collect questionnaires and surveys via social networks (LinkedIn, Angellist)	D5.5, D5.6, D5.4	M5.6	T5.5		15/10/2017	14/10/2020
P3: FERIT	T5.8 Establish a monitoring system for entrepreneur attitude and newcos created by graduates in telecommunications engineering (by means of surveys, data bases, etc.)	D5.5, D5.6, D5.4	M5.6, M5.7	T5.8		15/10/2017	14/10/2020
P4: ENT	T5.4 Monitor graduates profile, improvements in the skills, correspondence to industry needs	D5.4, D5.5, D5.6	M5.6	T5.4		15/10/2017	14/10/2020
P6: UNSA	T5.2 Consolidation of areas to be monitored, indicators, and correction strategies both internal and external	D5.2	M5.2	T5.2		15/10/2017	14/04/2018
P9: UNI NIS	T5.6 Monitor student enrolment statistics in the region	D5.4, D5.5, D5.6	M5.6	T5.6		15/10/2017	14/10/2020

Task leader	Activity description	Outcome	Indicator	Task ID	Person in charge	Start date	End date
WP 6					Snježana Rimac Drlje		
P1: UNI-KLU	T6.1 Development of the project web site combined with the web platforms developed in the other WPs. Preparation of the materials to keep the project web site up to date with the current activities.	D6.1	M6.1, M6.2, M6.3, M6.4	T6.1		15/10/2017	14/10/2020
P1: UNI-KLU	T6.5 Organize a yearly event (hosted in turn by the HEIs partners) in the form of a webinar broadcasted to all locations to present the study programmes, tips on study engineering targeting enrolled and prospective students/pupils	D6.5	M6.5, M6.6, M6.7	T6.5			14/07/2020
P1: UNI-KLU	T6.6 Establish agreements for future double degrees, joint teaching, student mobility beyond the project duration, bilateral agreements within Erasmus+ KA1	D6.6	M6.19, M6.20	T6.6			14/10/2020
P1: UNI-KLU	T6.7 Create an agreement for the maintenance of the web platform beyond the project life time	D6.7	M6.18	T6.7			18/08/2020
P1: UNI-KLU	T6.8 Create partnerships for follow-up projects and H2020 funding for research projects on telecommunication engineering	D6.8		T6.8			14/10/2020
P2: UL	T6.3 Create promotional and dissemination material targeting high schools' students and society at large (exploiting also media)	D6.3		T6.3			14/10/2020
P3: FERIT	T6.2 Preparation of exploitation and dissemination plan.	D6.2		T6.2			14/04/2018

P4: ENT	T6.4 Organize an annual open event outreaching a wide audience that includes public authorities, industry, students, pupils and non-expert people	D6.4	M6.8, M6.9, M6.17, M6.10, M6.11, M6.12, M6.13, M6.14, M6.15, M6.16	T6.4			14/10/2020
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Task leader	Activity description	Outcome	Indicator	Task ID	Person in charge	Start date	End date
WP7					Andrea Tonello		
P1: UNI-KLU	T7.1 Creation of a project management (PM) board	D7.1		T7.1			14/01/2018
P1: UNI-KLU	T7.2 Creation of an e-platform for project management (e.g., wiki page)	D7.2		T7.2			14/01/2018
P1: UNI-KLU	T7.3 Monitor and coordinate the overall project	D7.3	M7.1, M7.2	T7.3			14/10/2020
P1: UNI-KLU	T7.4 Maintain flow of information between partners and the funding agency	D7.4	M7.3, M7.4	T7.4			14/10/2020
P1: UNI-KLU	T7.5 Organize regular meetings (face to face and remote)	D7.3	M7.1, M7.2	T7.5			14/10/2020
P1: UNI-KLU	T7.6 Monitor the financial aspects of the project, funding, and prepare the reports	D7.5	M7.1, M7.2, M7.4	T7.6			14/10/2020

5.2 WP2: Identified curriculums to be modernized

One of the main the goals of WP2 is the modernization of the curricula in telecommunication engineering in the western Balkan partner universities. Below we list the identified curricula at the present stage.

- **University of Banja Luka**, Faculty of Electrical Engineering: “Electronics and Telecommunication” and “Computer Science and Informatics” (BSc and MSc). Particular attention will be given to the courses related to signal processing and telecommunications.
- **University of Sarajevo**: Bachelor and Master study programme of the Department for Telecommunications.
- **University of Tuzla**: “Electrical Engineering and Computer Science”, module: “Telecommunications” of the first and second cycle of study.
- **University of Belgrade**, School of Electrical Engineering: BSc module: “Telecommunications and Information Technologies”; MSc module: “System Engineering and Radio Communications”.
- **University of Niš**, Faculty of Electrical Engineering: “Electrical Engineering and Information Technology”; BSc module: “Telecommunications - Submodule Radio Communication Engineering and Technologies”; MSc module: “Radio Communication Engineering and Technologies”.
- **University of Novi Sad**: Faculty of Technical Sciences: Power, Electronic and Communication Engineering; BSc module: “Information and Communication Technologies and Signal Processing”; MSc modules: “Information and Communication Technologies”, and “Signal Processing”.

5.3 WP3: Identified laboratories to be created/modernized

In WP3 several laboratories in the WB universities will be created and/or modernized. Specifically, the labs will focus on the following fields:

- **University of Banja Luka**: Signal Processing in Telecommunications remote Lab in collaboration with Bicom and AlfaNum;
- **University of Sarajevo**: Embedded Systems Lab in collaboration with BIT Centar;
- **University of Tuzla**: VoIP services Lab in collaboration with Bicom;
- **University of Belgrade**: IoT (Internet of Things) Lab in collaboration with CISCO;
- **University of Niš**: Machine-to-Machine (M2M) Radiocommunication Lab in collaboration with NiCAT;
- **University of Novi Sad**: Smart Grid Communications Lab focusing on connected electrical vehicles, in collaboration with RT-RK and SE-DMS.

5.4 WP4: Identified training activities

Training activities will be part of the WP4. In detail:

- **AlfaNum** will help define the competences in the domain of signal processing, language and speech technologies, machine learning and CPU/GPU algorithm optimization. It will also offer internships to students in these domains.
- **Bicom** will contribute their own software solutions for the student trainings in the field of VoIP services. Bicom will contribute to the student internships (5 students per year) and provide 5 student supervisors from the company, seeking a sustainable model for internship and collaboration with academy to continue after the project lifetime. A technical training in the field of VoIP technologies for the teaching staff and students will be held in Tuzla by Bicom experts.

- **BIT Centar** will provide inputs about necessary skills that will make the students more valuable to companies through communications with SMEs, actively participate in organization of student internships in SMEs (15 students per year) and organize two workshops for SMEs for the feedback between industry and academia in the development of student competences associated with the study programs.
- **CISCO** will contribute to the education in the field of the IoT systems. In the scope of the project, CISCO will organize trainings for the university staff in the technical fields but also in the fields of teaching/learning methodology and tools. Also, CISCO will organize summer schools for the university students.
- **Ericsson Nikola Tesla** will provide training in the field of machine-to-machine communications. They will enrol at least 5 students from partner countries in Summer Camps where students will gain practical experience and share their applied research in preparation of diploma thesis.
- **NiCAT** cluster will organize two trainings for staff on the local level including participants from the region of University of Nis and one local training for students. The cluster will provide internship for up to 10 students.
- **RT-RK** will offer to 5 students from the partner institutions to choose and attend industry driven courses to foster practical implementation towards a more thorough realization of the scientific results of their research.
- **SE-DMS** will contribute to the project events and trainings by providing their expert guidance, presentations and knowledge in the field of industrial communications and control systems (SCADA, Industrial IoT), information technologies for Smart Grid, software development for large-scale distributed systems.

5.5 WP5: Quality plan

The Quality Plan presents main definitions of quality management procedures, processes of planning and execution of project activities. The goal of the document is to ensure the project maintain its quality by defining the minimum set of procedures and requirements that are needed in order to ensure an effective quality assurance and control. The manual provides the templates for reporting in appendix.

The quality plan has been consolidated and it is part of D5.2.

5.6 WP6: Dissemination plan

WP6 includes all the dissemination activities done to promote the BENEFIT project and its outcomes. It is planned to develop a website with updated information and a web platform containing relevant documents. Moreover, project members will organize two events every year: an open event at one of the participant universities, where the project will be presented to a generic audience and informative material in form of leaflets and posters will be distributed; a webinar, more oriented to students and industries, focusing on the ICT study program developed by the BENEFIT project and the potential outcomes. Finally, special sections of WP6 are devoted to exploit the outcomes of the BENEFIT project to promote research efforts beyond the duration of the project and to create durable partnerships among the project members and possibly other industries or institutions.

The dissemination plan has been consolidated and it is part of D6.2.

5.7 WP7: Management plan

Management will be carried out within the activities of the WP7. The management boards and the governance procedures are described in Section 3 and 3.1. One project meeting per year will be carried out and a number of project events have been planned as detailed in Section 6. Regular conference

calls will be organized, e.g. once per month, with the management board and the development board. Financial reports to the EC will be done twice (at month 18 and at the end of the project). To allow an effective monitoring of activities and progress of expenses, it has been agreed to collect financial reports every 6 months. In the first six months, the kick-off meeting has been done in Klagenfurt, another project meeting was done in Novi Sad, and the partnership agreement has also been completed.

In D7.2 the constitution of the management board is reported as well as a summary of main management activities that will be carried out by the coordinator.

All project activities and internal documentation will be recorded and uploaded on the project management site (CONFLUENCE) while all publically available documentation will be rendered accessible on the project web site <https://www.project-benefit.eu/>.

6 Planned meetings and events

BENEFIT has planned a number of project meetings and events. They are listed in the table below.

	Project meetings	Date	Location	Funded Partners
M1.1	summary of preparation activities	28-29/3/18	Novi Sad	P1,2,3,5,6,7,8,9
M7.1	project meeting	15-16/11/17	Klagenfurt	All
M7.1	project meeting	M12	Ljubljana	All
M7.1	project meeting	M24	Osijek	All
M7.1	project meeting	M33	Klagenfurt	All
M7.2	project meeting via web conference 3X	Every 6 months	Web	---

	Seminars	Date	Location	Funded Partners
M4.4	seminar	M13	UNS	---
M4.4	seminar	M14	UB	---
M4.4	lab practice	M24	AlfaNum	---
M4.4	conference	M20	RT-RK during ZINC 2019	---

	Student exchange	Date	Location	Funded Partners
	Courses – students visiting	?	Zagreb - ENT	(only students) P5,6,7,8,9,10
	Courses – students visiting	?	Zagreb - ENT	(only students) P5,6,7,8,9,10
	Courses – students visiting	?	Beograd	(only students) P5,6,7,9,10
	Courses – students visiting	?	Tuzla	(only students) P8,9,10
	Courses – students visiting	?	Klagenfurt	(only students) P6,7

	Training event	Date	Location	Funded Partners
M4.6	Professional training courses to teaching staff members	M18	UNI-KLU	P2,3,5,6,7,8,9,10
M4.7	Professional training courses to teaching staff members	M22	UL	P1,3,5,6,7,8,9,10
M4.9	Professional training courses to teaching staff	M24	FERIT	P1,2,5,6,7,8,9,10
M4.8	Teacher training modules	M26	Banja Luka	P1,2,3,6,7,8,9,10
M4.8	Teacher training modules	M31	Sarajevo	P1,2,3,5,7,8,9,10
M4.8	Teacher training modules	M32	Nis	P1,2,3,4,6,7,8,10
	Observation week	?	Ljubljana	P6,7,8
	Observation week	?	Klagenfurt	P5,9,10

	Event	Date	Location	Funded Partners
M5.5	QCM Board meeting	M18	Banja Luka	P1,2,3,4,6,9

M5.5	meeting	?	Ljubljana	P1,3,4,6,9
	Audit by UL	?	Beograd	P2
	Audit by UL	?	Novi Sad	P2
	Audit by UL	?	Tuzla	P2

7 Conclusions

This deliverable has presented a consolidated plan of all implementation actions to be performed during the project. It has been conceived as an easy-to-read and compact guide so that all partnership members can have an immediate look at activities, deliverables and milestones which include planned meetings and events.

8 References

- [1] BENEFIT D1.1 - **Consolidated ex-ante analysis and guidelines aimed at boosting the telecommunications engineer profile including a projection of needs for ICT engineers in the future** -, April 2018.
- [2] BENEFIT D5.2 - **Development of guidelines for QC and quality plan** -, April 2018.
- [3] BENEFIT D6.2 - **Report on exploitation and dissemination plan** -, April 2018.
- [4] BENEFIT D7.1 - **Report on the project management (PM) board and its establishment** -, April 2018.
- [5] BENEFIT D7.2 - **Report on the project management (PM) e-platform for sharing documentation** -, April 2018.

9 Annex – GANTT of Activities, milestones and deliverables.