BENEFIT
Boosting the telecommunications engineer profile to meet modern society and industry needs

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Project:	Boosting the telecommunications engineer profile to meet modern society and industry needs [BENEFIT]
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	Description	The document 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.
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Revision History

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1	29. 3. 2018	U. Burnik, D. Žagar, N. Mališ-Ilić, D. Bošković, D. Huljenić, F. Marcuzzi, M. Zajc, A. Tonello	UL, FERIT, UNI, US, UNI-KLU	Initial document
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LIST OF ACRONYMS

DB	Development Board
DX.Y	Deliverable X.Y
EACEA	Education, Culture and Audiovisual Executive Agency
FO	Financial Officer
HEI	Higher Education Institutions
ICT	Information and Communication Technologies
LFM	Logical Framework Matrix
MB	Management Board
MSX.Y	Milestone X.Y
MX	Month X
PC	Project Coordinator
PiC	Person in Charge
QB	Quality Control and Management (QCM) Board
QC	Quality Control
QCM	Quality Control and Management
TE	Telecom Engineer
TX.Y	Task X.Y
WB	West Balkan
WPX	Workpackage X

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1 INTRODUCTION

The main objective of the BENEFIT project is to modernize study programmes from the field of telecommunication engineering in participating partners towards ICT engineering in order to meet the demanding needs of modern industry. The project will offer the framework and support to foster the regional collaboration, which is necessary to increase the quality and attractiveness of telecommunication studies and to harmonize the study programmes and methodologies with EU highest standards. Its goals will be achieved by introduction of new teaching mechanisms and through a combination of laboratory and industrial training. The mechanisms will be evaluated by involvement of industrial and educational experts and disseminated in public events and network services.

Universities in the Western Balkan (WB) region that offer study programs in telecommunication engineering are experiencing a reduced number of students despite the fact that telecommunications is a pillar in modern economy. The major reason is that the telecom industry is passing through significant changes and the labour market requires a new profile for the telecom engineer (TE): a professional that is trained in the broad ICT domain, which owns both technical and market-oriented skills and consequently can contribute to the techno-economic society challenges.

Accordingly, BENEFIT will contribute to shape a modern profile of graduates in telecom/ICT engineering bridging the gap with the job market needs, which is a concrete action in response to the recently announced programmatic goals by WB countries for integration in the EU.

The EU character of the project will ensure modernization of the telecommunication engineer profile by having EU HEIs bringing their experience and helping to enhance the study programmes quality in WB partner HEIs. Value will be attained by creating more skilled and competent graduates, which will reflect in better-qualified engineers that work in WB companies and contribute to the innovation process of such companies at EU levels. Study programme improvements, innovative teaching and training methodologies, new labs, and internships will result in students being better prepared for a flexible international job market, recognized by employers at EU level, which enhances mobility opportunities. BENEFIT focus is on ICT, which is aligned with the EU strategy of stimulating the wider application of ICT in society and economy. The

objectives will be attained only if HEIs in WB and EU countries work together to exchange good practices, enhance curricula and their contents, and facilitate mutual studies and degrees recognition as well as cooperation with industry. WB companies will also benefit by rendering themselves more visible at EU level, potentially diminish the drain of experts and attract employees from the EU.

2 QUALITY EXPECTATIONS AND DEFINITION OF "QUALITY" WITHIN THE BENEFIT PROJECT

Quality expectations of the BENEFIT project will be defined first and foremost defined in terms of Project ability to achieve the general objective (i.e. to render the existing telecommunications study programmes more attractive and to boost the TE profile in the region) in a operational setting defined by the three BENEFIT pillars:

- Cooperation between HEIs and industry to modernize the study program in telecommunication engineering;
- Adoption of modern teaching methodologies and tools, the upgrade of the lab infrastructure, and the creation of joint university-industry labs;
- Implementation of training of both teachers and students.

In other words, effectiveness and impact will be the priorities while shaping BENEFIT approach to quality control.

This approach to quality control has been formalized through the development of guidelines for QC containing the methodology that will be followed by the partners of the BENEFIT project with the goal to achieve the highest possible quality of the project activities and results, as well as project management.

Coherently to what agreed among the partners, the achievement of the general objective shall always be in the forefront of all decisions to be taken. In practical terms, it means that the partners might adopt strategies such as:

- decide to prioritise certain activities over others
- identify and propose changes to the way activities are implemented (accordingly with Erasmus+ program rules)
- identify and propose changes to timelines (accordingly with Erasmus+ program rules)

Considering the related assumptions and risks, this kind of changes to project activities will be always justified by the empirical evidence coming from BENEFIT implementation and validated by discussions among partners.

All the deliverables (specified in section 2.1.) will be analysed and evaluated in terms of

- Relevance: is the deliverables coherent with the planned content?
- Effectiveness: did the deliverable contribute to the achievement of the general and specific objectives
- Timing: was the deliverable delivered according to the planned timeline?

All these criteria will be approached and defined according to the project workplan as identified in the Application Form and Action Plans (modified and agreed if necessary by the MB on six-month basis).

2.1 PROJECT ACTIVITIES, DELIVERABLES AND MILESTONES

The project deliverables are organised in a form of tangible deliverables (eg. reports, publications, manuals, methodology, plans, printed and electronically available promotional material), as well as intangible deliverables in the form of organized events (training, conferences, seminars, info days, etc.)

The deliverables are here grouped according to the Work Package (from 1 to 7) along with the corresponding tasks and milestones:

WP1: Consolidation of ex-ante analysis and preparation of implementation actions
- T1.1: Survey and analysis of telecommunications engineering study programmes in relation to modern society and industry needs (Task leader: FERIT).
- T1.2: Consolidate guidelines for curriculum modernization in cooperation with industry (Task leader: UL).
- T1.3: Preparation of implementation actions (Task leader: UNI-KLU).
- 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.
- M1.1: Kick-off meeting as planned in WP7 (M1).
- M1.2: Snapshot of present situation about the telecommunications engineering curriculum development in WB HEIs including survey of the existing policies and local constraints (M3).
- M1.3: Preliminary summary of industry needs, profile competencies and skills needed (M5).
- M1.4: Completion of the action plan and curriculum development guidelines (M6).
- M1.5: Project meeting as planned in WP7 (M6).

WP2: University-enterprise cooperation and modernization of telecommunications engineering study programmes (M7-M36)
- T2.1: Modernization of telecommunications engineering study programmes (within 1st and 2nd cycles) in 3 B&H and 3 Serbian HEIs in cooperation with ICT industry (Task leader: UNTZ).
- T2.2: Delivery of courses in the modernized and accredited study programmes (Task leaders: UNTZ, UNS).
- T2.3: Creation and periodic update of Web portal linking ICT study programmes and

enrolment procedures (Task leader: UNI-KLU).

T2.4: Creation and periodic update of Web catalogue of industry capacities and companies in the WB region (Task leader: FERIT).

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.

M2.1: Identification of specific classes to be modified/added in each WB HEI study program and delivery of guideline driven course structure modernization to the coordinator (M9).

M2.2: Development of class content and class material for new and modernized classes (M16).

M2.3: Institution meeting for approval of modernized courses and beginning of accreditation procedure (each HEI partner manages this internally, minutes of meeting to be delivered to the coordinator by M18).

M2.4: Completion of study programs modernization (M23).

M2.5: Initial implementation and delivery of study programs (M25).

M2.6: Full delivery of modxernized study programs (M36).

M2.7: Study programs web portal design drafted by FERIT and approved by the project coordinator (M10).

M2.8: Study programs web portal released (M12).

M2.9: Study programs web portal updated with new programs (M23).

M2.10: Industry web catalog implementation by the FERIT team (M16).

M2.11: Companies listing in the web catalogue with the contribution of the industry partners and ICT clusters (M24).

M2.12: Multi language implementation of the industry web portal and continuous updating (M28).

WP3: Modernization of teaching methodologies and infrastructures (M7-M30)

T3.1: Adoption of new learning/teaching methods, tools, ICT best practices in teaching (Task leader: UNS).

T3.2: Creation of joint university-industry labs and modernization of the lab infrastructure (Task leader: UNI- KLU).

T3.3: Development of innovative training methods involving industry (Task leader: RT-RK).

T3.4: Development of learning/teaching methods based on student competitions, and development of student challenges and hackathons (Task leader: UNS).

T3.5: Creation of web repository for class material and remote classes including audio-libraries (Task leader: FERIT).

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.
M3.1: Identification of modern teachning methodologies (M12).
M3.2: Adoption of tools and equipment to enable innovative teaching methodologies (M21).
M3.3: Development of teaching/learning methods based on students engagement via challenges, hackatons (M24).
M3.4: Identification of laboratory infrastructure to be restructured in each WB university and initial steps for the joint university-industry labs (M8).
M3.5: Establishment of formal links and joint lab operation agreements between university and company (M16).
M3.6: Purchase and installation of the laboratory equipment (M24).
M3.7: Delivery of web repository and platform starting from from D2.3 (led by FERIT, by M14).
M3.8: Collection of preliminary teaching material for new and modernized courses (M20).
M3.9: Complete translation of preliminary teaching material from MS3.8 (M23).
M3.10: Upload of the new teaching material from MS3.9 on the web repository (each WB HEI partner manages this internally, the WP coordinator verifies delivery of milestone, by M24).

WP4: Training and internship implementation (M13-M36)
T4.1: Creation of web portal for training and internship opportunities (Task leader: FERIT).
T4.2: Implement framework for student training in cooperation with EU partners and industry (Task leader: UB).
T4.3: Offer techno-economic, entrepreneurial and IPR related training modules (Task leader: UNS).
T4.4: Implementation of teacher training modules.
T4.5: Surveys and reports on training/internship.
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.
M4.1: Web platform for teaching material collection designed and developed by the FERIT (M18).
M4.2: Student training modules involving at least 60 students per year.
M4.3: Internships and co-supervised theses involving at least 30 students per year.

M4.4: Three seminars for students organized by UNS (M13), UB (M14) and RT-RK during ZINC 2018 (M20) conference regarding telecommunications technical topics as well as entrepeneurship and IPR related topics, one lab practice (organized by AlfaNum M24).
M4.5: Collection of surveys and questionnaires defined by UL on training modules (M19).
M4.6: Professional training courses to a selected number of teaching staff members, organized by UNI-KLU about remote lab operation methods (M18).
M4.7: Professional training courses to a selected number of teaching staff members organized by UL, with support of education sciences experts, about teaching methods (M22).
M4.8: Teacher training modules offered to at least 100 members by involved companies CISCO/RT-RK/SE DMS about modern industrial lab tools and functions; Seminar in Banja Luka (M26) - Sarajevo (M31) - Seminar in Nis (M32).
M4.9: Professional training courses to a selected number of teaching staff members organized by FERIT about ICT teaching practices (M24).

WP5: Quality control and monitoring (M1-M36)
T5.1: Establishment of the QCM Board and appointment of external experts for QC (1 QC expert and 2 external advisors) (Task leader: UNI-KLU).
T5.2: Consolidation of areas to be monitored, indicators, and correction strategies both internal and external (Task leader: UNSA).
T5.3: Internal control of project progress and outcomes (Task leader: UL).
T5.4: Monitor graduates profile, improvements in the skills, correspondence to industry needs (Task leader: ENT).
T5.5: Collect questionnaires and surveys via social networks (LinkedIn, AngelList) (Task leader: FERIT).
T5.6: Monitor student enrolment statistics in the region (Task leader: UNI).
T5.7: Establish a monitoring system for employment statistics of graduates in Telecommunications engineering (Task leader: UL).
T5.8: Establish a monitoring system for entrepreneur attitude and newcos created by graduates in telecommunications engineering (by means of surveys, databases, etc.)
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.

M5.1: QCM Board establishment (M3).
M5.2: Quantitive indicator definition for project progress evaluation, as part of QCB duties (M3).
M5.3: Activity report delivered by QCM board to MB twice a year.
M5.4: Define QCM structure (M4).
M5.5: QCM Board meeting in Banja Luka (M18);
M5.6: Implementation of surveys and questionnaires to retrieve feedback on employment from graduates working in partner industries; study and analysis of social network (LinkedIn, AngelList, Facebook) capabilities with respect to project visibility (M24).
M5.7: Stakeholder appraisal relative to D5.6 (M30).

WP6: Dissemination and exploitation of project outcomes (M1-M36)
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. (Task leader: UNI-KLU).
T6.2: Preparation of exploitation and dissemination plan. (Task leader: FERIT).
T6.3: Create promotional and dissemination material targeting high schools' students and society-at-large (exploiting also media) (Task leader: UL).
T6.4: Organize an annual open event outreaching a wide audience that includes public authorities, industry, students, pupils and non-expert people (Task leader: ENT).
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 (Task leader: UNI-KLU).
T6.6: Establish agreements for future double degrees, joint teaching, student mobility beyond the project duration, bilateral agreements within Erasmus+ KA1 (Task leader: UL).
T6.7: Create an agreement for the maintenance of the web platform beyond the project life time (Task leader: FERIT).
T6.8: Create partnerships for follow-up projects and H2020 funding for research projects on telecommunication engineering (Task leader: UNI-KLU).
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.
M6.1: Establishment of a workgroup dedicated to coordinate dissemination actions (M1).
M6.2: Central web platform design drafted by FERIT and approved by the project coordinator (M10).
M6.3: Central web platform released (M12).
M6.4: Central web platform linked with the other online services created in the previous WPs (M24).
M6.5: Webinar on studying telecommunications engineering hosted by UBL (M10).
M6.6: Webinar on studying telecommunications engineering hosted by UNI (M22).
M6.7: Webinar on studying telecommunications engineering hosted by UB (M34).
M6.8: Open Event involving the community on studying ICT with the participation of a renowned keynote speaker in Ljubljana (M9).
M6.9: Open Event involving the community on academia-industry cooperation in teaching with the participation of a renowned keynote speaker in Sarajevo (M21).
M6.10: Open Event and dissemination involving the community on entrepeneurship with the participation of a keynote speaker in Novi Sad (M36).
M6.11: Project progress dissemination in Tuzla during IntSikt 2018 conference (M8).
M6.12: Special session organization in Tuzla during the IntSikt 2019 conference (M20).
M6.13: Project progress dissemination in Tuzla during IntSikt 2020 conference (M32).
M6.14: Seminar on cloud computing research and teaching in Belgrade (M14).
M6.15: Workshop on telecommunications for smart systems in Klagenfurt (M19).
M6.16: Dissemination in Portoroz during ERK 2020 conference (M36).
M6.17: Preliminary exploitation plan (M25).
M6.18: Signature of agreement for the prolonged existence of the web platform (M34).
M6.19: Agreements for maintenance of joint labs with industry (M36).
M6.20: Agreement for further cooperations in education HEIs aiming at establishing at least one double degree and promoting students mobility (M36).

WP7: Project coordination and management (M1-M36)
T7.1: Creation of a project management (PM) board (Task leader: UNI-KLU).
T7.2: Creation of an e-platform for project management (e.g., wiki page) (Task leader: UNI-KLU).
T7.3: Monitor and coordinate the overall project (Task leader: UNI-KLU).
T7.4: Maintain flow of information between partners and the funding agency (Task leader: UNI-KLU).
T7.5: Organize regular meetings (face- To-face and remote) (Task leader: UNI- KLU).
T7.6: Monitor the financial aspects of the project, funding, and prepare the reports (Task leader: UNI-KLU).

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.
M7.1: On an annual basis there will be physical project meetings, according to the following schedule: kickoff meeting in Klagenfurt (M1), project meeting in Ljubljana (M9), project meeting in Osijek (M24) and wrap up meeting in Klagenfurt (M33).
M7.2: On an annual basis there will be a project meeting carried out via web conference for a total of three instances. Schedule will be decided at the kickoff meeting and distributed by M3.
M7.3: PC and the funding agency will communicate annually to assess the project progress.
M7.4: Financial reports will be delivered to the coordinator on an annual basis, according to the following schedule: first report (M12), second report (M24) and final report (M36).

3 BENEFIT QUALITY MANAGEMENT WORKPACKAGE (WP5)

Quality control of the project will take place throughout the entire project duration. A dedicated WP5 is established to monitor and to manage the quality requirements of the project. This section of the document relies on the activities and procedures defined by the original project application, the decisions made at the kick-off meeting, and on the Partnership Agreements.

Apart from this, BENEFIT also relies on the following documents as a reference:

- EACEA – BENEFIT project Grant Agreement
- BENEFIT project Dissemination and Exploitation Plan
- BENEFIT project budget and task assignment
- Erasmus + Guidelines for the Use of Grants
- Erasmus + Frequently Asked Questions

3.1 RELATION BETWEEN QUALITY MANAEGEMENT AND BENEFIT PROJECT MANAGEMENT

The project management will be implemented by creating the following structure:

- Management Board (MB)
- Development Board (DB)
- Quality Control and Management Board (QB)

The MB will be led by the Project Coordinator (PC) and will include one representative per project partner country. It will also include the Project Secretariat (PS) and appoint a Financial Officer (FO).

The MB will be responsible to monitor the project progress, the achievement of milestones and the delivery of planned results as well as monitor the financial aspects and the use of resources. To closely monitor the development activities, the MB will consult the DB. The DB will include the WP leaders and it 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 PC will coordinate closely with the partner representatives to ensure that the project progresses efficiently. The PC tasks will be therefore:

- Lead and coordinate the project and the MB
- Monitor the project implementation with close relation to the DB
- Monitor the project financial aspects in consultation with the FO
- Evaluate difficulties and develop contingency plans.

- Collect the financial reports from the partners, review them and prepare the reports due to the funding agency
- Manage the organization of plenary project meetings and events.

The MB will have two meetings per year, face-to-face or via conference call.

The DB is responsible to organize more frequent meetings or conference calls to discuss development activities and report to the PC and MB especially if difficulties are encountered. The activity of the PC will be aided by the PS that will work on administrative and organization 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 to the FO for budgeting and financial activities. Finally, conflicts resolution will be managed together with the Quality Control and Management Board (QB).

The project management will be transparent and flexible but also strict enough to ensure the implementation of the project activities in order to achieve the project's objectives. Each partner is equally and independently responsible for assigned activities, reporting and distribution of money. Contact persons have the responsibility for the local management.

3.2 BENEFIT QUALITY CONTROL AND MONITORING

Quality control and monitoring work package (WP5) is led by UL, and is responsible for quality control and monitoring system throughout the project. UNI-KLU coordinates the establishment of the Quality Control and Management Board (QB) (MS5.1) and appointment of external experts for QC. UNSA consolidates indicators and correction strategies (both internal and external) (MS5.2 at M3) while UL leads the process of internal control of project progress and outcomes (MS5.3). More specific tasks, such as monitoring of employability of graduates, will be implemented and coordinated by ENT. FERIT will organize collection of questionnaires and surveys via social networks (MS5.6). Student enrolment statistics in the region will be tracked by UNI. Finally, UL and FERIT will lead the establishment of a monitoring system for employment statistics and for entrepreneurship skills of graduates in telecommunications engineering, respectively.

The internal members of Quality Control and Management Board (QB) were assigned at the project's kick-off meeting. The board consists of 5 members representing: University of Klagenfurt, University of Ljubljana, University of Niš, University of Sarajevo, University of Osijek, one external QB member and 2 external evaluators. The board will also include two student representatives, which will ensure better representation of student feedback (see WP5.3).

It is defined in the Application and agreed at the kick-off meeting that QB will be meeting regularly and annually. Extra meetings may be collocated with other events.

Quality Control and Monitoring (QCM) will be performed continuously during the project realization. QCM will be implemented as follows:

- QCM board (QB) will be established and it will comprise representatives of the partner universities participating in the project and external experts outside the consortium.
- QB will review each project activity in consultation to the Development Board (DB) and Management Board (MB) (see WP7).

A team of external evaluators will provide an independent assessment of the project by verifying the content of the QCM reports, to give recommendations on areas that could be further developed and improved, and to provide an opportunity for dialogue among evaluators and strengthen the self-assessment process. The team of external evaluators will also be in charge for the delivery of the intermediate and final evaluation report.

The qualitative information needed to update project indicators will be gathered through:

- Desk analyses of reports draft by the PiC for each activity
- Surveys chiefly targeting students
- Qualitative questionnaires for interviews with key-informants

Reports summarizing the results of quality assessment will be sent to all project members: discussion about problems highlighted by QM will be eventually scheduled during the project meetings. The effectiveness and quality of the developed project plan and outputs of the development WPs and dissemination and exploitation WP will be visible in reports.

QCM activities will include:

- monitoring and evaluation of deliverables
- suggestion of improvement strategies, including evaluation of:
  - offered new courses,
  - improved teaching and lab facilities,
  - teaching staff training,
- monitoring the achievement of objectives:
  - impact of the project at each university,
  - impact of the project at regional/national level.
  - increased employability of the graduates resulting from the project actions,
  - collecting a feedback from students and industry representatives,
  - monitoring students' ability to enter the job market
  - monitoring students' ability to enter job market through entrepreneurial initiatives as start-ups.

The QCM activities will be organised within the tasks of WP5 and will follow the requirements specified in the Logical Framework Matrix (Annex A). The status of successfully evaluated BENEFIT documents will be marked as APPROVED BY QB within the Intranet project documentation portal on Confluence.

The QB will also report the outcome of the evaluation, the identification of deficiencies, and delays to the MB and DB so that the appropriate countermeasures can be taken.

3.3 BENEFIT QUALITY PROCEDURES

Quality Control and Monitoring (QCM) activities are performed continuously during the project duration. The WP leader is UL. The QCM Board (QB) is to be established at the kick-off meeting by assembling a team of representatives from UL, UNI-KLU, FERIT, UNI, UNSA and ENT. One external QB member is to be appointed. In addition, he is to be assisted by two external evaluators that act as advisors to provide inputs and independently assess the project results. QC will cover two main areas.

- quality control and contingency planning of the project activities and results,
- monitoring the level of achievements w.r.t. the targeted goals (graduates profile improvement, employability/employment improvements, increased collaborations with industry, …).

The main activities comprise of:

- Consolidation of areas to be monitored with selected indicators and correction strategies (both internal and external).
- Internal control of project progress and outcomes.
- Monitoring of graduates profile, improvements in skills, and correspondence to industry needs.
- Collect questionnaires and surveys, taking advantage also of social networks.
- Monitor student enrolment statistics in the region.
- Establish a monitoring system for employment statistics of graduates in telecommunication engineering for monitoring of employability/employment improvements, …
- Monitoring of level of collaborations with industry.
- Establish a monitoring system for entrepreneurship attitude and new companies created by graduates in telecommunication engineering.
- Organize board meetings in addition to regular conference calls: one planned in Ljubljana and one in Banja Luka) plus an assessment visit by the QB leader from UL to UB, UNSA, UNTZ.

The project activities and deliverables will be constantly monitored in consultation with the management board. Deviations and difficulties will be examined and actions for quick solution will be determined. The activities of external QB member and external evaluators will be: to overview and verify the internal QA report, to give recommendations on areas that could be further

developed and improved, and to provide an opportunity for dialogue among evaluators and strengthen the self-assessment process.

Indicators will be measured and updated through report analyses, surveys and questionnaires. QCM activities will also include evaluation of student reactions, achievement of objectives and impact of the project on the institutions as a whole, as well as the project results in terms of increased cooperation with the socio/economic environment, the correspondence between the graduate's skills and job market needs, the time-to-employment of graduates and statistics of employment, student awareness of their skills and their entrepreneurial attitude, and job opportunities. The assessment and monitoring of the correspondence between objectives and graduate profile, alignment of professional and academic requirements will be done.

Quality indicators will follow: the development of QC guidelines adopted and distributed to all partners, reports on project implementation made by WP leaders and evaluated by QB, reports on graduate's profile improvements and correspondence to industry needs, tools for monitoring students enrolment and employability/employment/entrepreneurial statistics of graduates developed and delivered to partners, reports on reached stakeholders beyond the consortium.

Apart from establishment of quality indicators and monitoring, quality-related measures also include design of various templates to further facilitate procedures related to activities leading to staff costs and travel costs (exp. justifying travelling by personal car, etc.); the use of templates will be mandatory.

3.4 BENEFIT REPORTING

The original project application text assumes that by the end of the project:

- regular reporting on the progress of all WPs is compulsory
- regular reporting by each lead partner is compulsory

These reports will be considered as indicators of project quality both for their content (i.e. the information they will summarise will be part of the quality control system) and for the quality and timing of their delivery (the timely delivery of appropriate reports will be per se an indicator of quality), the will help sum up the progress in the given period, and allow QB to get a clear picture of the realisation of the project. In other words, if there are any discrepancies between the workplan and the realised activities, QB will react timely and prevent further delays.

Based on the results of evaluation, at least every year a public report on quality evaluation will be published, which will cover the quality evaluation of all participating parties.

3.5 BENEFIT REPORT ANALYSIS

The reporting is provided in the application, and confirmed at the kick-off meeting, Periodic reports will be generated by the QCM Board (QB) and will indicate all the problems encountered and suggestions how to overcome them. Reports will include students' feedback and feedback from labour market's obtained during project development and implementation.

The basic tools for quality assessment will be: questionnaires, peer reviewing by external evaluators, feedback reports and evaluation surveys from training and workshops. Examples of the questionnaire items are: appropriateness of the learning outcomes, structure of curriculum and courses, the availability and accessibility of learning resources, interim reports on performance indicators about the student performance, student evaluation of the teaching process, improvement of teaching staff methodologies, etc.

The evaluations performed by the QB will be distributed to all participants. Two representatives of students will join the board to make sure that the student feedback is well represented.

QB representatives will carry out annual visits to all WB partners. This will lead to annual quality reports evaluating all project activities. Meetings are already planned in Ljubljana and Banja Luka. The QB chair from UL will also carry out visits for monitoring progress and quality in Belgrade, Novi Sad and Tuzla. Reports will be presented on project management meetings. Also, one external QB member and two external evaluators will review the final report. The curriculum guidelines for the modernization of telecommunications engineering study programme developed in WP1 will undergo a deep evaluation and assessment.

QB will make a report analysis. This analysis is necessary in order to prepare an action plan for the remedy of all problems possibly identified in the reports. The conclusions made by QB are compulsory for all project partners.

4 BENEFIT DELIVERABLES

4.1 DOCUMENT BASED DELIVERABLES

BENEFIT takes care that all our deliverables have a common appearance. This step is important for the visual recognition of the project and as an important help in final reporting to both the Project Coordinator and to EACEA.

Therefore, all the partners are supposed to follow uniform templates for all document-based deliverables. The templates are provided within the BENEFIT project intranet page in a Templates folder located at https://intranet.aau.at/display/projbenefit/Templates.

4.2 PUBLICITY CONTROL

The project coordinator (UNI-KLU) is responsible for the design of the promotional material. The draft version will be sent to all partners for comments and suggestions, before printing, publishing and distribution. The materials will be disseminated by all the partners at appropriate events in order to reach the project's target group.

All the publications and events produced by the partners have to have Erasmus+ logo followed by the sentence: "*Funded by Erasmus+ Programme of the European Union.*" This is to be placed on the cover or the first page.

Every product made through this project has to have the following disclaimer on the inner pages:

> *"The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein."*

4.3 BENEFIT EVENTS

The organizers of all the project events (working meetings, studying abroad, etc) should provide a full information package to the participants including the draft agenda, letter of invitation and a note on the logistics (informing about travel arrangements, venue, suggested hotels, etc) in due time.

The organizers will record the minutes of the meetings, which will be distributed to all the project participants and made accessible via project portal. After each meeting the feedback forms will be distributed among participants for quality management purposes.

Posters and other promotional materials will be set-up during the event in order to increase visibility of the events.

Each event should be documented as appropriate using one or more of the proposed media: project website, Intranet site (Confluence), news, agenda, list of participants with affiliation, list of trainees, report, gallery, presentations (upon the approval of the presenter), video materials (upon approval of authors).

4.4 BENEFIT WEBSITES AND OTHER ELECTRONIC TOOLS

The BENEFIT project foresees an immediate set up of a dedicated project website for dissemination purposes. This website is to be developed and maintained by UNI-KLU, while all the partners are expected to effectively communicate the results of the project keeping the website information up to date.

A dedicated portal based on Confluence is set up and maintained by project coordinator, UNI-KLU. It can be accessed by all partners depending on their assigned tasks and roles and represents a single point of reference for the project documentation and communication among partners. For preparation of working documents, a shared Dropbox folder is set up and may be used by all partners subject to invitation.

All partners are asked to promote BENEFIT project on their websites and other electronic tools (such as: Facebook, Twitter and LinkedIn profiles/groups, newsletters, etc.) by providing short description of the project, logo and link to BENEFIT website.

4.5 BENEFIT LOGO

This BENEFIT logo serves to increase the visibility of the project. It has to be used for all the project deliverables and its official project documents.

BENEFIT
Boosting the telecommunications engineer profile to meet modern society and industry needs

This logo is designed by the University of Ljubljana.

4.6 QUALITY FEEDBACK BY THE TARGET GROUPS

The quality of the project events will be ensured by collecting a variety of information using visits, interviews, questionnaires, consultation, and other forms of activities. These will bring awareness of the satisfaction of beneficiaries and other target groups. A template for feedback is created as a tool of impact assessment of the project activities. This template may be slightly adapted to conform to the specific needs of different events. Its main items shall not be deleted.

Besides, a specific event report template available under the Templates folder at the project's Intranet site https://intranet.aau.at/display/projbenefit/Templates is to be filled in and collected by project partners (organisers) for all BENEFIT events (workshops, info days, trainings). Report will include summary review of statistical data and will help in final reporting.

5 BENEFIT QUALITY ASSURANCE STRATEGY

We plan to carry out the internal monitoring by all the partners, which will include self-evaluation based on the workplan, budget and cash flow tables, MB and DB meetings, monitoring visits and questionnaires obtained at the appropriate surveys of target groups.

For quality assurance, we will deploy quality control in BENEFIT at 4 major levels as listed below. The WP leader should use the template "QCM_Manual_Template_6_Deliverable_Approval.docx" to track the deliverable approval steps.

1. The work of individual institutions, their teams, the cooperation within the teams, as well as their cooperation with the WP leader and the partners involved in the activity will reflect in quality of project deliverables. The partners will be responsible for the quality and timeliness of the deliverables as suggested by the action plan. The quality will be ensured using an internal review process before QB evaluation. The internal reviewer will verify whether the deliverable satisfies the requirements and objectives as defined in the project proposal, identify the potential issues and suggest improvements to the authors in 7 days after reception. The authors will respond to the review comments to WP leader in 7 days. After a successful review completion, the WP leader will forward the deliverable draft to QB for evaluation.
2. The deliverable will be evaluated by a designated member of QB. The evaluator will have to respond in 5 working days by delivering their comments using the predefined Document Evaluation Template (QCM_Manual_Template_8_Deliverable_QB_evaluation.docx). In case of quality-related inconsistencies, the deliverable will be returned to Level 1 for refinement.
3. Should the reviewers, QB evaluators and the authors come in a profound disagreement, the project coordinator should apply a 3rd level control of the deliverables which includes the necessary corrective actions in order to achieve acceptable deliverables. If necessary, the Coordinator may involve the rest of the Consortium.
4. After positive evaluation result, the WP leader publishes deliverable on Confluence portal and requests the acknowledgement by each project partner. Partners' representatives acknowledge the acceptance and publication of the deliverables using a form on Confluence. After receiving the acknowledgements, the WP leader gives a final approval of the Deliverable and publishes the document.

5.1 RESPONSIBILITIES OF THE CONSORTIUM

Within this project, there exist several bodies with different roles and responsibilities regarding the project activities and quality assurance procedures in particular.

An Activity leader, or PiC, is assigned to each BENEFIT deliverable. Author and co-authors are reported for each deliverable. Each activity belongs to a specific workpackage and each

workpackage has its own leader. In cooperation with the Project Coordinator, QB controls the quality of activities and deliverables. The Management Board is the highest body of the project and is responsible for making final decision. The responsibilities of the Consortium bodies are as listed in following statements:

Activity Leader (main responsible of the deliverable) is responsible for

- coordination of deliverable(s) development according to the deliverable template,
- distribution of the work assignments among other partners involved in the activity,
- coordination of the work assignments of all partners involved in the activity,
- submission of the deliverable to the WP leader, the QB, and the Project Coordinator,
- implementation of the suggestions provided by the QB team,
- regular reporting to WP Leader, especially in case of identified issues,
- cooperation with the WP Leader and other partners in the same WP with the goal to ensure the progress of activity in line with the time schedule.

Other partners involved in the activity, the co-authors, are responsible for

- the production of their part in the deliverable according to the instructions,
- provision of their contribution in compliance with the prescribed templates,
- provision of all the complementary information regarding their work (i.e. references, bibliography, methodologies used, contact details of people interviewed etc.) to the activity leader,
- implementation of amendments to their contribution requested by the QB.

WP Leader

- coordinates the Work Package and ensures that all the activities contribute to the WP's objectives and are performed in the time frame as defined by the Workplan,
- makes sure that all the partners are smoothly cooperating in order to accomplish the WP's objectives,
- sends timely reminders about submission deadlines and the procedures to be followed
- provides inputs and suggestions to the activity leaders,
- provides comments and suggestions on the deliverables,
- verifies the satisfactory implementation of the recommendations,
- reports to QB, MB or the project coordinator as required.

Quality Control and Management Board (QB)

- is coordinated by the QB Leader,
- receives reports from Activity leaders and WP leaders and provides feedback,
- verifies the satisfactory implementation of the recommendations,
- cooperates with the Project Coordinator on quality related issues

Project Coordinator

- cooperates with the QB and the activity leaders on all matters arising relevant to ensure the quality of the project's deliverables,
- accepts the deliverables or provides final comments to the Task leaders and WP leaders,
- cooperates with the WP Leaders to ensure that all WPs are progressing in compliance with the Workplan,
- informs QB, WP leaders and Task leaders of any changes in the implementation of the project that may affect the timing or the content of the relevant deliverables,
- collects and officially submits all approved deliverables to the Consortium and EACEA.

Development Board (DB)

- reports the progress of activities, achievements and possible difficulties to MB who analyses the situation and propose a contingency plan in case of issues so that the project can progress and achieve the planned goals.
- cooperates with the Project Coordinator

Management Board (MB)

- is responsible to monitor the project progress, the achievement of milestones and the delivery of planned results as well as monitors the financial aspects and the use of resources,
- officially approves and finally accepts the deliverables.
- cooperates with the Project Coordinator.

5.2 PROJECT RISK MANAGEMENT

It is advised that a regular risk assessment be carried out during the Management Board meetings, which shall lead to corrective actions and potential adaptations of the workplan. This assessment will take care of issues that could endanger the project achievements. Specific emphasis will be on monitoring the possible risks identified in the Logical Framework Matrix of the Project Proposal (Annex A). These include financial risks (overspending and underspending), timing (postponing of activities) and sustainability of the project results. The main aim will be to provide a sound assessment, to anticipate challenges in a systematic way and to minimize the potentially negative overall impact. In case of serious risks, MB should suggest alternatives, workarounds and the proposed corrective actions that will make the risk consequences acceptable for the consortium.

The identification and assessment of new risks is a joint responsibility of all project partners and of external evaluation experts who have to communicate them to the Project Coordinator and the Management Board, eventually suggesting also possible interventions and solutions, as soon as they get aware of those risks. In particular, partners may think of preventive actions (avoiding that the risk occurs) and corrective actions (decreasing the severity and impact), specifying also the resources that would be needed.

The main risks emerged are summarised up to now are summarised in the following table:

RISK	PROPOSED MITIGATION STRATEGY	LEVEL OF RISK
Disagreement between partners	Where disagreement occurs between participating partners the lead partner will act to mediate discussion and locate a solution that may require compromise. In the case of disagreement between the lead partner and another partner then another member of the partnership will be asked to assist in the process of resolution. Should a substantial disagreement arise the full consortium will be involved in developing a shared understanding of the problem and agree as a group the best resolution and actions to move forward.	LOW
Communication problems among partners	In case of communication issues, project manager will introduce regular checks with responsible WP leaders, either by phone or in person, to monitor progress of tasks and to address any professional or personal issues that could affect the project.	LOW
Key project personnel leaving the project	PM will promptly re-allocate resources and assign replacements in case of necessity. If necessary, reschedules will be proposed the way to minimize influence of delays to related project activities.	MEDIUM
Missing deadlines.	PM will regularly monitor the progress of tasks and milestones and impose internal deadlines in case of necessity.	LOW

All the partners should take care of the proper allocation of resources. There are several main risks in this field: the delay of the project implementation; the rushed implementation with low quality; an over/underspending; and that the relevant expenditures are not timely invoiced or validated.

5.3 PARTNERS' TECHNICAL AND FINANCIAL REPORTING

The main guidelines for the reporting are established in partnership agreement and management deliverables. WP7 is responsible for performing the reporting procedure in a timely manner and that budget is spent according to the plan. The project's Management Board, Development Board and Coordinator will check reporting documents by taking into consideration the following criteria: conformity of the expenditures with the budget; eligibility of the expenditures; correctness and completeness of all supporting documents and certified copies of invoices; correctness of the calculations and applied exchange rates; financial reports have to be signed in original by the appointed contact person of partner institution.

In case that information are not complete or justified, the Management Board will recommend how this situation can be rectified.

5.4 SUMMARY OF QUALITY ASSESSMENT TOOLS

Provided that quality assessment tools could be created once specific and unmet needs emerge during project implementation, BENEFIT already have available a toolbox for quality assessment and activities monitoring:

- Minutes of the Meeting template: it is used to summarise the contents of project meetings and to verify the coherence with the actual and the planned agenda
- Meeting Evaluation Form: it will be used to understand the degree of satisfaction of those who attended BENEFIT meeting considering the both scientific and logistic aspects of the meeting
- Meeting Attendance Sheet: it will help to demonstrate the attendance to the meetings
- Deliverable Evaluation Form: it will be used to evaluate the quality of each deliverable
- Milestone Verification Form: it will be used to certify the achievement of a Milestone by verifying the compliance between planned and actual timing and the sources of verification
- BENEFIT logbook: it is a Excel file that simply summarising the information collected through the use of the other tools

The related documents are available from within the Intranet project documentation portal on Confluence; https://intranet.aau.at/display/projbenefit/Templates.

6 ANNEXES

Several supporting documents were elaborated for the overall enhancement of the project quality assurance plan.

Many quality assurance actions are related to LFM, which was part of the original project proposal. This document is attached in its integrity as Annex A.
An important part of the quality assurance activities involved the identification and definition of quantitative and qualitative indicators of progress. These elements are reported in Annex B.
Annexes C and D show the step-by-step procedures developed for the approval of deliverable and milestone related documents.
Most activities in the second half of the project for the quality assurance team involve surveys and questionnaires. Annex E reports a survey template showing the desired structure for the documents/tools used for these activities.

- Annex A: Logical Framework Matrix (LFM)
- Annex B: List of Indicators of Progress
- Annex C: Procedure for Deliverable Approval
- Annex D: Procedure for Milestone Approval
- Annex E: Survey Template

Other supporting materials and templates are available for internal use and are located within the BENEFIT project Intranet template folder located at https://intranet.aau.at/display/projbenefit/Templates.

6.1 ANNEX A

Logical Framework Matrix extracted from the original project proposal. Starts on the next page.

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LOGICAL FRAMEWORK MATRIX – LFM

Wider Objective: *What is the overall broader objective, to which the project will contribute?* • To improve the telecommunications engineer profile in the WB region to meet the fast changing techno-economical needs of industry and society.	***6.1.1 Indicators of progress:*** *What are the key indicators related to the wider objective?* • Improved competences, skills and abilities of the new generation telecommunications engineers, aimed at increasing their ability to contribute to the fast changing ICT industry in involved WB countries. • Improved HEI-Industry cooperation according to modern society needs in the WB region.	***6.1.1.1 How indicators will be measured:*** *What are the sources of information on these indicators?* • Surveys collected from all stake-holders: students, teachers, industry and society • Market and employment analysis reports (conducted by 3 industrial clusters involved in the project) • External evaluation reports • Project progress reports through web portals.	***6.1.2***
Specific Project Objective/s: *What are the specific objectives, which the project shall achieve?* • To modernize the curricula in tele-communications engineering modules of accredited study programmes at 6 WB HEIs through modernized courses, the adoption of new learning/teaching tools/methodologies, and the	**6.2 INDICATORS OF PROGRESS:** *What are the quantitative and qualitative indicators showing whether and to what extent the project's specific objectives are achieved?* • Formation of the modernized curriculum structure. • Delivering pilot professional training courses to a selected number of teaching staff members.	**How indicators will be measured:** *What are the sources of information that exist and can be collected? What are the methods required to get this information?* • Project and quality reports • Official study programme. documentation at HEIs websites. • Faculty/labs/departments documentation. • Amount of successfully installed equipment and renovated teaching	**Assumptions & risks:** *What are the factors and conditions not under the direct control of the project, which are necessary to achieve these objectives? What risks have to be considered?* **Assumptions:** • Conducted research really provide information concerning the needs for new generation telecommunication engineers to meet modern society and industry

improvement of the lab infrastructure. • To increase HEI-Industry cooperation through the implementation of new trainings and internships and the creation of joint labs that will translate in higher job opportunities. • To increase the attractiveness of the telecommunication engineering curricula through a common HEI-Industry e-platform that collects and links: study programmes, video lectures, innovative network of audio-libraries, training/internship opportunities, industry profiles and	• Level of adoption of new learning/ teaching tools/methodologies. • Number of modernized courses in accredited BA and MA study programmes at 6 HEIs from Serbia and B&H. • Identification of the new laboratory equipment. • Establishment of formal links and univ.-company agreements. • Purchasing of laboratory equipment. • Number of labs with modernized infrastructures at 6 HEIs and number of joint HEI-Industry labs • Number of new trainings and internships developed in HEI-Industry cooperation at 6 WB HEIs. • Increased job opportunities for new telecommunication engineers. • Increased number of students who opt for the telecommunication	facilities. • Establishment of HEI and Industry agreements related to joint labs, new trainings and internships. • Employment statistics of telecom-munication engineers and their salaries. • Collection of questionnaires, interviews and surveys. • Enrolment of students in the tele-communications engineering study programmes. • Data acquired from developed e-platforms (curricula, internships and employment offer)	needs. • Assure good collaboration strategy among HEIs and Industry partners from the five countries. • Awareness and commitment of stakeholders to cooperate with academic institutions. • The project Website will be updated regularly as planned. • The activities will be done as planned. • The consortium specialities cover the required skills to develop the planned activities. **Risks:** • Take into consideration different laws defining high education in the countries of the project partners. • Reluctance to implement the project outcomes from other institutions. • Unexacted delays from partners to complete the activities.

job opportunities.	module within already accredited study programmes of electrical engineering. and computer sciences • Level of completion of web e-platforms reporting: study programs, internship opportunities, companies catalog, employment offers.		
Outputs (tangible) and Outcomes (intangible): *Please provide the list of concrete DELIVERABLES - outputs/outcomes (**grouped in Workpackages**), leading to the specific objective/s.:* **WP1: Consolidation of ex-ante analysis and preparation of implementation actions (M1-M6)** 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.	**Indicators of progress:** *What are the indicators to measure whether and to what extent the project achieves the envisaged results and effects?* **WP1 (M1-M6):** • Kick-off meeting (M2). • Report of present situation about the telecommunications engineering. curriculum development in WB HEIs including survey of the existing policies and local constraints (M3). • Preliminary summary of industry needs, profile competencies and skills needed (M5). • Completion of the action plan and	**How indicators will be measured:** *What are the sources of information on these indicators?* • Project website and number of visits. • Project partners websites. • Project reports including evaluation of trainings, workshops, dissemination activities, exploitation and quality plan, as well as progress management reports. • Quality and monitoring reports. • Applicability and sustainability of proposed guidelines for the next	**Assumptions & risks:** *What external factors and conditions must be realised to obtain the expected outcomes and results on schedule?* **Assumptions:** • Good project management. • Good financial management. • Consensus in the consortium about the most important issues. • Slow reaction of HEIs and Industry partners to provide data concerning joint project activities can cause delays in participative processes. • Adequate response of key stakeholders to questionnaires

WP2: University-enterprise cooperation and modernization of Telecommunications Engineering study programmes (M7-M36) 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.	curriculum development guidelines (M6). **WP2 (M7-M36):** • Identification of specific classes to be modified/added in each WB HEI study program and delivery of guideline driven course structure modernization to the coordinator (M9). • Study programs web portal design drafted by FERIT and approved by the project coordinator (M10). • Study programs web portal released (M12). • Development of class content and class material for new and modernized classes (M16). • Industry web catalogue implementation by the FERIT team (M16). • Institution meeting for approval of modernized courses and beginning of accreditation procedure (each HEI partner	generation telecommunication engineers. • Number of selected new and modernized courses at 1st and 2nd cycles at 6 involved universities. • Number of university-industry labs ruled according to an agreement. • Number of university staff members trained for new and modernized classes and labs. • Number of students enrolled to modernized study programmes. • Number of students included into internships and number of theses co-supervised with industry. • Number of student/staff mobilities. • Number of trainings, workshops and events, as well as their attendants (attendance lists from all events). • Number and structure of purchased equipment (list in the inventory books).	and call for interviews and their representation is provided by the 3 ICT clusters as project partners. • Academic and public authorities will be motivated to implement and present the achieved project results that include modernized university-industry labs, teaching methodologies exploiting remote teaching and ICT tools. • Timely advertising and media promotion to reach the majority of interested groups. • Well-defined internal evaluation procedures and protocols in partner HEIs. **Risks:** • Low interest by internal human resources to be enrolled in training activities is a small rate risk for the proposed project for HEIs, but medium rate risk for industry partners. • Members of the Project

WP3: Modernization of teaching methodologies and infrastructures (M7-M30) D3.1: Development of modernized teaching methodologies. D3.2: Creation of six joint university-company labs ruled by an agreement.	manages this internally, minutes of meeting to be delivered to the coordinator by the end of M18). • Completion of study programs modernization (M23). • Study programs web portal updated with new programs (by M23). • Companies listing in the web catalogue with the contribution of the industry partners and ICT clusters (by M24). • Initial implementation and delivery of study programs (M25). • Multi language implementation of the industry web portal and continuous updating (by M28). • Full delivery of modernized study programs (M36). **WP3 (M7-M30):** • Identification of laboratory infrastructure to be restructured in each WB university and initial steps for the joint university-industry	• Number of textbooks published including guides for new equipment. • Number of new and modernized courses included into audio-library. • Satisfaction survey of new learning material quality reviewers. • Students' satisfaction survey reports. • Feedback, questionnaire results from clusters and other industrial partners. • Number of signed agreement about long-term cooperation between HEIs and non-academic partners. • Designed and printed project promotion material. • Newsletters, e-bulletins, newspapers. • Reports from presentation meetings, presentations for media and interested groups. • Minutes from meetings and formal PM board decisions.	Management Board and working groups are overloaded with their other daily activities but use of the collaboration platform will increase their efficiency. • Accreditation procedures delay the activities. • Delay of supplying the equipment due to import regulations, etc.

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.	labs (by M8). • Identification of modern teaching methodologies (M12). • Delivery of web repository and platform starting from D2.3 (led by FERIT, by M14). • Establishment of formal links and joint lab operation agreements between university and company (M16). • Collection of preliminary teaching material for new and modernized courses (M20). • Adoption of tools and equipment to enable innovative teaching methodologies (M21). • Complete translation of preliminary teaching material (M23). • Development of teaching/learning methods based on students engagement via challenges, hackatons (M24). • Purchase and installation of the laboratory equipment (M24).	• Quality control and management reports • External audits. • Using IT tools for measurement of web page visit and registration to courses and training activities. • An indicator of success will be the implementation of a system for monitoring the implementation of the project by showing in a web system scheduled activities, responsibilities, delivered results.	

WP4: Training and internship implementation (M13-M36) 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.	• Upload of the new teaching material from M3.9 on the web repository (each WB HEI partner manages this internally; the WP coordinator verifies delivery of milestone, by M24). **WP4 (M13-M36):** • Student training modules involving at least 60 students per year. • Internships and co-supervised theses involving at least 30 students per year. • Three seminars for students organized by UNS (M13), UB (M14) and RT-RK during ZINC 2018 (M20) conference regarding telecommunications technical topics as well as entrepreneurship and IPR related topics, one lab practice (organized by AlfaNum M24). • Web platform for teaching material collection designed and		

WP5: Quality control and monitoring (M1-M36) D5.1: Establishment of Quality Control (QC) board and appointment of external experts	developed by the FERIT(M18). • Professional training courses to a selected number of teaching staff members, organized by UNI-KLU about remote lab operation methods (M18). • Collection of surveys and questionnaires defined by UL on training modules (M19). • Professional training courses to a selected number of teaching staff members organized by UL, with support of education sciences experts, about teaching methods (M22). • Professional training courses to a selected number of teaching staff members organized by FERIT about ICT teaching practices (M24). • Teacher training modules offered to at least 100 members by involved companies CISCO/RT-RK/SE DMS about modern industrial lab tools and functions; - Seminar in Banja Luka (M26) -		

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 (M1-M36)** D6.1: Central project web platform	Sarajevo (M31) - Seminar in Nis (M32). **WP5 (M1-M36):** • QCM Board establishment (M3). • Quantitive indicator definition for project progress evaluation, as part of QCB duties (M3). • Activity report delivered by QCM board to MB twice a year. • Define QCM structure (M4). • Guidelines for QC developed by QC board, adopted and distributed to all partners by M4. • Reports on project implementation made by WP leaders, delivered twice a year and evaluated by QC group. • Implementation of surveys and questionnaires to retrieve feedback on employment from graduates working in partner industries; study and analysis of social network (LinkedIn, AngelList, Facebook) capabilities with respect to project		

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	visibility (M24). • Stakeholder appraisal relative to D5.6 (M30). **WP6 (M1-M36)** • Establishment of a workgroup dedicated to coordinate dissemination actions (M1). • Project progress dissemination in Tuzla during IntSikt 2019 conference (M8). • Open Event involving the community on studying ICT with the participation of a renowned keynote speaker in Ljubljana (M9). • Central web platform design drafted by FERIT and approved by the project coordinator (M10). • Webinar on studying telecommunications engineering hosted by UBL (M10). • Central web platform released (M12). • Seminar on cloud computing		

funding for research projects on telecommunication engineering involving industry.	research and teaching in Belgrade (M14). • Workshop on telecommunications for smart systems in Klagenfurt (M19). • Project progress dissemination in Tuzla during IntSikt 2019 conference (M20). • Open Event involving the community on academia-industry cooperation in teaching with the participation of a renowned keynote speaker in Sarajevo (M21). • Webinar on studying telecommunications engineering hosted by UNI (M22). • Central web platform linked with the other online services created in the previous WPs (M24). • Preliminary exploitation plan (M25). • Preliminary exploitation plan (M25). • Project progress dissemination in Tuzla during IntSikt 2020		

	conference (M32). • Webinar on studying telecommunications engineering hosted by UB (M34). • Signature of agreement for the prolonged existence of the web platform (M34). • Signature of agreement for the prolonged existence of the web platform (M34). • Open Event and dissemination involving the community on entrepreneurship with the participation of a keynote speaker in Novi Sad (M36). Agreements for maintenance of joint labs with industry (M36). • Dissemination in Portoroz during ERK 2020 conference (M36). • Agreements for maintenance of joint labs with industry (M36). • Agreement for further cooperation's in education HEIs aiming at establishing at least one double degree and promoting		

WP7: Project coordination and management (M1-M36) 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.	students mobility (M36). • Increased awareness of telecommunications and ICT technology benefits to society measured with participation to organized workshops and open events, and amount of collected feedback (M36). **WP7 (M1-M36)** • Project management board established at the kick-off meeting in M1. • On an annual basis there will be physical project meetings, according to the following schedule: kick-off meeting in Klagenfurt (M1), project meeting in Ljubljana (M9), project meeting in Osijek (M24) and wrap up meeting in Klagenfurt (M33). • On an annual basis there will be a project meeting carried out via web conference for a total of three instances. Schedule will be decided		

	at the kick-off meeting and distributed by M3. • PC and the funding agency will communicate annually to assess the project progress. • Financial reports will be delivered to the coordinator on an annual basis, according to the following schedule: first report (M12), second report (M24) and final report (M36).		
Activities: *What are the key activities to be carried out (**grouped in Workpackages**) and in what sequence in order to produce the expected results?* **WP1: Consolidation of ex-ante analysis and preparation of implementation actions (M1-M6)** T1.1: Survey and analysis of telecommunications engineering study programmes in relation to modern society and industry needs (Task leader: FERIT). T1.2: Consolidate guidelines for curriculum modernization in cooperation with industry (Task	***6.2.1 Inputs:*** *What inputs are required to implement these activities, e.g. staff time, equipment, mobilities, publications etc.?* **Staff costs:** Total staff days: 4.311. Respectively: - 90 Manager days (CAT 1) P1-P15: 33 ,3 ,6 ,1, 7, 7, 7, 7, 7, 7, 1, 1, 1, 11. - 2.425 Teacher days (CAT 2) P1-P15: 195, 188, 199, 56, 221, 232, 341, 262, 232, 333, 48, 2, 66, 2, 48.		**Assumptions, risks and pre-conditions:** *What pre-conditions are required before the project starts? What conditions outside the project's direct control have to be present for the implementation of the planned activities?* **Assumptions and Risks:** • Well-organized coordination and cooperation based on mutual understanding among all partners at national and international level. • High commitment of project partners and especially of non-academic partners for the achievement of project objectives.

leader: UL). T1.3: Preparation of implementation actions (Task leader: UNI-KLU). **WP2: University-enterprise cooperation and modernization of Telecommunications Engineering study programmes (M7-M36)** T2.1: Modernization of telecommunications engineering study programmes (within 1st and 2nd cycles) in 3 B&H and 3 Serbian HEIs in cooperation with ICT industry (Task leader: UNITZ). T2.2: Delivery of courses in the modernized and accredited study programmes (Task leaders: UNITZ - UNS). T2.3: Creation and periodic update of web portal linking ICT study programmes and enrolment procedures (Task leader: UNI-KLU). T2.4: Creation and periodic update of web catalogue of industry	- 645 Technical staff days (CAT 3) P1-P15: 35, 0, 150, 0, 60, 60, 72, 60, 60, 72, 28, 0, 20, 0, 28. - 1.151 Administrative staff days (CAT 4) P1-P15: 313, 54, 56, 44, 44, 44, 44, 44, 44, 44, 155, 27, 155, 39. Total staff costs: 379.620 €. **Mobility days:** - Preparation WP1. Days: 42 EU-EU, EU-PC, PC-EU, PC-PC: 0, 12, 0, 30 days. - Development WP2-4. Staff days: 744 EU-EU, EU-PC, PC-EU, PC-PC: 48, 27, 444, 225 days. - Development WP2-4. Student days: 1772 EU-EU, EU-PC, PC-EU, PC-PC: 0, 0, 1380, 392 days. - Quality plan WP5. Days: 39		• Availability and motivation of key staff from the Industrial partners. • Great commitment and active participation of training/seminar participants. • Full recognition of new methodology for development of study programmes in telecommunications engineering based on HEI-Industry cooperation in involved WB countries. • Support by university management for the implementation of objective, thorough guidelines handbook and making of an effective action plan for implementation of modernized study programme thorough different mechanisms including accreditation. • Low/slow reaction by management offices at the universities. • Readiness of university partners to create a network of shared

capacities and companies in the WB region (Task leader: FERIT). **WP3: Modernization of teaching methodologies and infrastructures (M7-M30)** T3.1: Adoption of new learning/teaching methods, tools, ICT best practices in teaching (Task leader: UNS). T3.2: Creation of joint university-industry labs and modernization of the lab infrastructure (Task leader: UNI-KLU). T3.3: Development of innovative training methods involving industry (Task leader: RT-RK). T3.4: Development of learning/teaching methods based on student competitions, and development of student challenges and hackathons (Task leader: UNS). T3.5: Creation of web repository for class material and remote classes including audio-libraries (Task	EU-EU, EU-PC, PC-EU, PC-PC: 9, 18, 6, 6 days. - Dissemination WP6. Days: 87 EU-EU, EU-PC, PC-EU, PC-PC: 12, 24, 12, 39 days. - Management WP6. Days: 286 EU-EU, EU-PC, PC-EU, PC-PC: 66, 0, 219, 0 days. Total mobility costs: 299.845 €. **Equipment:** - Equipment (hardware and software) for labs modernization and implementation of joint HEIs and industry partners labs at the WB HEIs, for student training and teaching. - Audio-video equipment for teaching and video class material preparation.		teaching material and common audio-libraries. • High schools students and society at large be regularly approached and kept informed about project results.

leader: FERIT). **WP4: Training and internship implementation (M13-M36)** T4.1: Creation of web portal for training and internship opportunities (Task leader: FERIT). T4.2: Implement framework for student training in cooperation with EU partners and industry (Task leader: UB). T4.3: Offer techno-economic, entrepreneurial and IPR related training modules (Task leader: UNS). T4.4: Implementation of teacher training modules. T4.5: Surveys and reports on training/internship. **WP5: Quality control and monitoring (M1-M36)** T5.1: Establishment of the QCM Board and appointment of external experts for QC (1 QC expert and 2	Total equipment costs: 245.800 €. **Subcontracting:** - External audits for financial reporting. - External expert quality control. - Travel support to 2 HERE advisors. - Printing and publishing for dissemination activities. - Translation services. - Web sites and platforms hosting. - Support to open events costs: room renting, catering, publicity, translation services, travel for invited speakers		

external advisors) (Task leader: UNI-KLU). T5.2: Consolidation of areas to be monitored, indicators, and correction strategies both internal and external (Task leader: UNSA). T5.3: Internal control of project progress and outcomes (Task leader: UL). T5.4: Monitor graduates profile, improvements in the skills, correspondence to industry needs (Task leader: ENT). T5.5: Collect questionnaires and surveys via social networks (LinkedIn, AngelList) (Task leader: FERIT). T5.6: Monitor student enrolment statistics in the region (Task leader: UNI). T5.7: Establish a monitoring system for employment statistics of graduates in telecommunications engineering (Task leader: UL). T5.8: Establish a monitoring system	Total subcontracting costs: 42.000 €.		

for entrepreneur attitude and newcos created by graduates in telecommunications engineering (by means of surveys, databases, etc.) (Task leader: FERIT). **WP6: Dissemination and exploitation of project outcomes (M1-M36)** 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. (Task leader: UNI-KLU). T6.2: Preparation of exploitation and dissemination plan. (Task leader: FERIT). T6.3: Create promotional and dissemination material targeting high schools' students and society-at-large (exploiting also media) (Task leader: UL). T6.4: Organize an annual open			

event outreaching a wide audience that includes public authorities, industry, students, pupils and non-expert people (Task leader: ENT). 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 (Task leader: UNI-KLU). T6.6: Establish agreements for future double degrees, joint teaching, student mobility beyond the project duration, bilateral agreements within Erasmus+ KA1 (Task leader: UL). T6.7: Create an agreement for the maintenance of the web platform beyond the project life time (Task leader: FERIT). T6.8: Create partnerships for follow-up projects and H2020 funding for			

research projects on telecommunication engineering (Task leader: UNI-KLU). **WP7: Project coordination and management (M1-M36)** T7.1: Creation of a project management (PM) board (Task leader: UNI-KLU). T7.2: Creation of an e-platform for project management (e.g., wiki page) (Task leader: UNI-KLU). T7.3: Monitor and coordinate the overall project (Task leader: UNI-KLU). T7.4: Maintain flow of information between partners and the funding agency (Task leader: UNI-KLU). T7.5: Organize regular meetings (face-to-face and remote) (Task leader: UNI-KLU). T7.6: Monitor the financial aspects of the project, funding, and prepare the reports (Task leader: UNI-KLU).			

6.2 ANNEX B

In the following, we report the list of identified/defined indicators of progress for the tracking of project advancement.

Indicators

1. Indicators of progress

Indicator ID	Description	Target	Source
1.1	Number of milestones reached	67	WP5 Dusanka Boskovic
1.2	Number of meetings	12	WP5 Dusanka Boskovic
1.3	Number of webinars	3	WP5 Dusanka Boskovic
1.4	Number of deliverables	34	WP5 Dusanka Boskovic

2. Indicators of dissemination

Indicator ID	Description	Target	Source
2.1	Project web page	1	WP6 Snjezana Rimac Drlje
2.2	Number of visits to project web	1200	WP6 Snjezana Rimac Drlje
2.3	Central web platform	1	WP6 Snjezana Rimac Drlje
2.4	Number of visits to Central web platform	200	WP6 Snjezana Rimac Drlje
2.4	Designed(1), printed(2) and disseminated(3) project promotion material.	6(1) 300(2) 300(3)	WP6 Snjezana Rimac Drlje
2.5	Newsletters(1), e-bulletins(2), newspapers(3).	3(1) 1(2) 1(3)	WP6 Snjezana Rimac Drlje
2.6	Reports from presentation meetings, presentations for media and interested groups.	9	WP6 Snjezana Rimac Drlje

3. Indicators of quality

Indicator ID	Description	Target	Source
3.1	QCB established	1	WP5 Matej Zajc
3.2	Quality plan	1	WP5 Matej Zajc
3.3	Quality reports	6	WP5 Matej Zajc
3.4	Feedback, questionnaire results from clusters and other industrial partners.	40	WP5 Matej Zajc
3.5	External audits	6	WP5 Matej Zajc
3.6	Field visits	2	WP5 Matej Zajc
3.7	Minutes from QCB meetings.	18	WP5 Matej Zajc

4. Indicators of direct impact

Indicator ID	Description	Target	Source
4.1	Number of direct beneficiaries in the Partner country(ies) per year: academic staff from HEIs	120	WP7 Andrea Tonello
4.2	Number of direct beneficiaries in the PCs (/year): administrative staff from HEIs	12	WP7 Andrea Tonello
4.3	Number of direct beneficiaries in the PCs (/year): HE students	1050	WP7 Andrea Tonello
4.4	Number of direct beneficiaries in the PCs (/year): non HE individuals	200	WP7 Andrea Tonello

5. Indicators of training activities

Indicator ID	Description	Target	Source
5.1	Number of partner country "HEIs' students trained	120	WP4 Mladen Koprivica
5.2	Number of partner country "HEIs' academic staff" trained	100	WP4 Mladen Koprivica

5.3	Number of partner country "HEI's administrative staff" trained	12	WP4 Mladen Koprivica
5.4	Number of partner country "non-HEI individuals" trained (priv. sector, NGOs, civil servants, etc.)	0	WP4 Mladen Koprivica
5.5	Number of trainings	14	WP4 Mladen Koprivica

6. Indicators of modernized curricula

Indicator ID	Description	Target	Source
6.1	Number of modernized courses at 1st cycle of study.	20	WP2 Nermin Suljanovic
6.2	Number of modernized courses at 2nd cycle of study.	12	WP2 Nermin Suljanovic
6.3	Number of novel specific-knowledge courses at 1st cycle of study.	6	WP2 Nermin Suljanovic
6.4	Number of novel specific-knowledge courses at 2nd cycle of study.	6	WP2 Nermin Suljanovic
6.5	Number of study programs involved in modernization	12	WP2 Nermin Suljanovic
6.6	Number of knowledge areas	17	WP2 Nermin Suljanovic
6.7	Number of knowledge areas with modernized courses	9	WP2 Nermin Suljanovic
6.8	Number of study programs included in the web portal (central platform)	12	WP2 Nermin Suljanovic
6.9	Number of courses on the web portal (BSc(1) and MSc(2))	20(1) 12(2)	WP2 Nermin Suljanovic
6.10	Number of textbooks published including guides for new equipment.	7	WP2 Nermin Suljanovic
6.11	Number of new and modernized courses included into audio-library.	6	WP2 Nermin Suljanovic

6.12	Number of study programs having implemented modernization	12	WP2 Nermin Suljanovic
6.13	Number of delivered modernized courses (BSc([1]) and MSc([2]))	20([1]) 12([2])	WP2 Nermin Suljanovic
6.14	Number of accredited study programs	12	WP2 Nermin Suljanovic
6.15	Number of students enrolled to modernized study programs.	1050	WP2 Nermin Suljanovic
6.16	Satisfaction survey of new learning material quality reviewers.	12	WP2 Nermin Suljanovic
6.17	Students' satisfaction survey reports.	32	WP2 Nermin Suljanovic

7. Indicators of modernized teaching methodologies

Indicator ID	Description	Target	Source
7.1	Number of new methods	30	WP3 Vlado Delic
7.2	Number of courses implementing new methods	32	WP3 Vlado Delic
7.3	Number of hackatons and team competitions	5	WP3 Vlado Delic

8. Indicators of industry co-operation

Indicator ID	Description	Target	Source
8.1	Number of university-industry labs ruled according to an agreement.	6	WP3 Vlado Delic
8.2	Number of purchased equipment units (list in the inventory books) and material.	100	WP3 Vlado Delic
8.3	Number of students included into internships.	48	WP3 Vlado Delic
8.4	Number of theses co-supervised with industry.	12	WP3 Vlado Delic

8.5	Number of companies listed in the web catalogue	30	WP3 Vlado Delic
8.6	Number of collaborating enterprises	9	WP3 Vlado Delic

9. Indicators of management

Indicator ID	Description	Target	Source
9.1	Partnership agreements	14	WP7 Andrea Tonello
9.2	Internal semi-annual financial reports	6	WP7 Andrea Tonello
9.3	PM board meetings and minutes	6	WP7 Andrea Tonello
9.4	PM board reports	3	WP7 Andrea Tonello

10. Indicators of sustainability

Indicator ID	Description	Target	Source
10.1	Number of university-industry labs ruled according to an agreement.	6	WP3 Vlado Delic
10.2	Number of signed agreement about long-term cooperation between HEIs and non-academic partners.	6	WP3 Vlado Delic

6.3 ANNEX C

Here we show the procedure to complete a deliverable approval. This procedure is divided into three steps, each one described step-by-step in a related template. We report in the following each template in the order required by the reporting procedure. This order is as follows:

- QCM_Manual_Template_6_Deliverable_Approval
- QCM_Manual_Template_7_Deliverable_Review
- QCM_Manual_Template_8_Deliverable_QB_evaluation

The documents start on the next page.

QCM_Manual_Template_6_Deliverable_Approval

Erasmus + Project No 585716-EPP-1-2017-1-AT-EPPKA2-CBHE-JP

Boosting the telecommunications engineer profile to meet modern society and industry needs - BENEFIT

Workpackage:	
Deliverable Title:	
Deliverable Authors:	
WP Leader:	

Step	
1. The responsible WP leader nominates one reviewer who has not been involved in the production of the deliverable at least 30 days before delivery date.	Reviewer: Click or tap here to enter text. Date assigned: Click or tap to enter a date.
2. The deliverable is sent to the WP leader at least 20 days before the expected delivery date.	Date received: Click or tap to enter a date.
3. The WP leader forwards the deliverable draft to the reviewer for peer review.	Date forwarded: Click or tap to enter a date.
4. The reviewer verifies whether the deliverable satisfies the requirements and objectives as defined in the project proposal, identifies the potential issues and suggests improvements to the authors in 7 days after reception.	Date reviewed: Click or tap to enter a date.
5. The authors respond to the review comments to WP leader.	Date responded: Click or tap to enter a date.
6. After successful review completion, the WP leader forwards the deliverable draft to QB for evaluation.	Date forwarded: Click or tap to enter a date.

Step	
7. A single designated member of QB performs a formal evaluation of deliverable using a Confluence evaluation form[1] (a template is attached).	QB evaluator: Click or tap here to enter text. Date evaluated: Click or tap to enter a date.
8. After positive evaluation result, the WP leader publishes deliverable on Confluence portal and requests the acknowledgement by each project partner[2].	Date published: Click or tap to enter a date.
9. Partners' representatives acknowledge the acceptance and publication of the deliverables using a form on Confluence .	Date acknowledged: Click or tap to enter a date.
10. WP leader gives final approval of Deliverable.	Date approved: Click or tap to enter a date.

[1] The QB approval ensures the compliance of finalized deliverable with project proposal. It is expected that a thoroughly prepared deliverable passes the compliance verification stage.

[2] The acknowledgement ensures all partners (through a designated person) formally express awareness of the deliverable content including its implications to project participants. The acknowledgement is not a review. It is assumed that the project partners took appropriate roles in the authoring stage of the deliverable. A negative vote on acknowledgement must be supported in writing and should only act in case of a serious misalignment of deliverable implications for a specific partner with project proposal and/or with previously acknowledged BENEFIT documents and actions. A prompt response is required (silence is approval).

QCM_Manual_Template_7_Deliverable_Review

Erasmus + Project No 585716-EPP-1-2017-1-AT-EPPKA2-CBHE-JP

Boosting the telecommunications engineer profile to meet modern society and industry needs - BENEFIT

Workpackage:	Number and title (e.g. "WP1, Title of the Workpackage")
Deliverable:	Number and title (e.g "D1.1, Title of the Deliverable)
Deliverable Authors:	
WP Leader:	Name Surname, Pxx/PPartner Acronym (Partner ID)
Reviewer:	Name Surname, Pxx/PPartner Acronym (Partner ID)

Assurance point	Issues to be addressed	Assessment	Comments	Recommendations
1.a Compliance with the objectives of BENEFIT	Does the document comply with the overall objectives of the project?	YES ☐ NO ☐ PARTIALLY ☐		
1.b Compliance with the specific objectives of the workpackage	Does the document comply with the Objectives as specified under WP descriptions?	YES ☐ NO ☐ PARTIALLY ☐		
1.c Correspondence with the description of work of the relevant activity	Does the document correspond with the activity description as specified in the Application Form?	YES ☐ NO ☐ PARTIALLY ☐		
2.a Compliance with BENEFIT Template	Is the document presented using the Project's predefined template?	YES ☐ NO ☐		

Assurance point	Issues to be addressed	Assessment	Comments	Recommendations
2.b Adequacy of complementary information	Examples of complementary info: - External sources used - Bibliography - List of contacts - Methodology used (i.e. for surveys)	YES ☐ NO ☐		
3. Adequacy of written language	Level of written English	EXCELLENT ☐ ADEQUATE ☐ POOR ☐		
4. Overall assessment and suggestions for improvement				
Date of review:		Click or tap to enter a date.		
Deadline for submission of corrections:		Click or tap to enter a date.		

QCM_Manual_Template_8_Deliverable_QB_evaluation

Erasmus + Project No 585716-EPP-1-2017-1-AT-EPPKA2-CBHE-JP

Boosting the telecommunications engineer profile to meet modern society and industry needs - BENEFIT

Workpackage:	Number and title (e.g. “WP1, Title of the Workpackage”)
Deliverable:	Number and title (e.g “D1.1, Title of the Deliverable)
Deliverable Authors:	
WP Leader:	Name Surname, Pxx/PPartner Acronym (Partner ID)
QB evaluator:	Name Surname, Pxx/PPartner Acronym (Partner ID)

Assurance point	Issues to be addressed	Assessment	Description of issue if present
1. Adequacy of deliverable	General compliance of deliverable specifications. Correct use of methodologies.	YES ☐ NO ☐	
2. Deliverable format	Adequate use of project’s template, external sources, bibliography and other related information.	YES ☐ NO ☐	
3. Adequacy of written language	Level of written English is adequate	YES ☐ NO ☐	
Date of Quality Assurance performed by QB:		Click or tap to enter a date.	

6.4 ANNEX D

Here we show the procedure to complete a milestone approval. This procedure requires the completion of one document, which is the template reported below.
The document starts on the next page.

QCM_Manual_Template_9_Milestone_Verification

Erasmus + Project No 585716-EPP-1-2017-1-AT-EPPKA2-CBHE-JP

Boosting the telecommunications engineer profile to meet modern society and industry needs - BENEFIT

Work Package:	Number and title (e.g. “WP1, Title of the Workpackage”)
Milestone ID:	Number and title (e.g “MS1.5, Title of the Milestone as listed in the proposal”)
Related Deliverables (if present):	D5.2
WP Leader:	Name Surname, Pxx/PPartner Acronym (Partner ID)
QB Evaluator:	Name Surname, Pxx/PPartner Acronym (Partner ID)

	Document name	Reference (link)
List of documents and proofs supporting the completion of the milestone		
Date of QB Evaluation Request:	Click or tap to enter a date.	

Assurance point	Issues to be addressed	Assessment	Description of issue if present
Was the milestone successfully completed?	Do the activities envisioned in the milestone comply with the objectives specified in the project proposal?	YES ☐ NO ☐ PARTIALLY ☐	
Was the milestone completed by the specified deadline?	When was the milestone completed? Does this comply with the date specified in the project proposal? (e.g., MS1.5 by M6)	YES ☐ NO ☐	
Date of Quality Assurance performed by QB:		Click or tap to enter a date.	

6.5 ANNEX E

In this section we report a survey template to show the desired structure and content of a meeting evaluation survey.

Erasmus + Project No 585716-EPP-1-2017-1-AT-EPPKA2-CBHE-JP
Boosting the telecommunications engineer profile to meet modern society and industry needs - BENEFIT

Event Name	
Date and Time	
Venue	
Host Institution	
Date of Assessment	

Please mark with X the appropriate column for each item according to your selected evaluation rate from 1 (worst) to 5 (best).

Evaluation Item	**Evaluation Rate**				
	1	**2**	**3**	**4**	**5**
What is your opinion of the general organization and facilities exploited during the event?					
To which extent did the event cover the announced title?					
What is your opinion of the presenters/facilitators?					
Level of quality of presentations given by speakers?					
To what extent did the event cover your professional needs?					
What is your opinion of the material that was distributed before or during the event? (if there was any)					
How do you evaluate the agenda of the event?					
How do you evaluate the technical resources used?					
To which extent did the event live up to your expectations?					
How satisfied are you from the level of participation to the event proceedings?					

Communication for preparation of the event was satisfactory.					
The targets of the meeting were fulfilled.					

Comments (Constructive Suggestions):

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