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## **Introducing Recent Electrical Engineering Developments into undErgraduate cuRriculum / IREEDER**

**609971-EPP-1-2019-1-JO-EPPKA2-CBHE-JP**

# **Quality Assurance Plan**

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## List of abbreviations

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- **CBHE:** Capacity Building in Higher Education
- **CS:** CyberSecurity
- **EACEA:** Education, Audiovisual and Culture Executive Agency
- **IREEDER:** Introducing Recent Electrical Engineering Developments into undErgraduate cuRriculum
- **IoT:** Internet of Things
- **MOU:** Memorandum of Understanding
- **QA:** Quality Assurance
- **QAP:** Quality Assurance Plan
- **QMC:** Quality Monitoring Committee
- **RE:** Renewal Energy
- **RMP:** Risk Management Plan
- **StC:** Steering Committee
- **SSC:** Scientific and Supervising Committee
- **WP:** Work Package



# 1. Introduction

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This document provides the Quality Assurance Plan (QAP) and the Risk Management Plan (RMP) for the Erasmus + CBHE project IREEDER – **Introducing Recent Electrical Engineering Developments into Undergraduate Curriculum** with project number 609971-EPP-1-2019-1-JO-EPPKA2-CBHE-JP. This plan is framed under “Work Package 4: Quality Plan”.

In order to ensure the success of this QAP, all project partners will perform their tasks effectively to achieve the intended results and create an impact in Jordan. In this sense, this document reflects the commitment of the partners of IREEDER project with the quality of all the results. Thus, quality assurance will be defined as an integral tool that aims to ensure that the project reaches its intended outcomes, that it delivers optimal value-for-money, and that the responsibility is shared by all partners.

This QAP defines the processes, methods and tools that will be used to ensure the quality of the project. It establishes a general approach to be followed by the partners for an effective production and documentation of project deliverables during the 36 months (from 15/11/2019 to 14/11/2022) of project implementation. The document will outline the strategy for how the quality assurance mechanisms will be applied so that the operational, management and working procedures are comprehensively monitored and improved throughout the project lifespan.

The QAP contains a set of scheduled activities and defines objectives, roles, and responsibilities. It also includes a set of indicators as per the project log frame, a methodology structure and procedures for the evaluation of the project activities and results.

In order to properly handle the potential problems that may arise during the lifetime of the project, this QAP is accompanied by a RMP. The RMP provides the framework to ensure that levels of risk and uncertainty are properly managed.

Both, the QAP and the RMP can be modified during the project lifespan to adapt it to possible modifications or cope with other unforeseen circumstances, by agreement of all parties.

## 1.1. Objective and Scope

After the award of the IREEDER project, the Quality Monitoring Committee drew up this guide, which includes all the general operating procedures and questionnaires that will be used to obtain data on the implementation of activities within the project and the satisfaction of IREEDER partners.

Quality activities can be divided in three groups:

- **Quality Planning:** Defines quality policies and procedures relevant to the project deliverables and processes.
- **Quality Assurance:** Creates and monitors project processes that have to be completed effectively to reach the desired outcome.
- **Quality Control:** Should be performed actively by all partners, with reviewing mechanisms that assess the quality of the outcomes of the project.

Thus, the QAP will consider different components:

- **Deliverables and activities/processes:** Key deliverables and activities subject to quality review.
- **Deliverable/Process quality criteria (qualitative and quantitative indicators):** Metrics used to determine a successful outcome of a deliverable or an activity.
- **Quality control activities:** Procedures taken to monitor and verify the project deliverables and activities.
- **Quality assurance activities:** Activities that monitor whether the processes used to manage and create the results of the project are followed and are effective.
- **Risk management activities:** Activities that deal with risk monitoring and control.



## 1.2. Partners

	Beneficiary		Country	Website
1	Al-Hussein Bin Talal University (AHU) (coordinator)	AHU	Jordan	<a href="http://www.ahu.edu.jo">http://www.ahu.edu.jo</a>
2	Mutah University	MU	Jordan	<a href="https://www.mutah.edu.jo/Home.aspx">https://www.mutah.edu.jo/Home.aspx</a>
3	Tafila Technical University	TTU	Jordan	<a href="http://www.ttu.edu.jo">http://www.ttu.edu.jo</a>
4	Philadelphia University	PU	Jordan	<a href="http://www.philadelphia.edu.jo/">http://www.philadelphia.edu.jo/</a>
5	Alisra for Education and Investment	IU	Jordan	<a href="https://iu.edu.jo">https://iu.edu.jo</a>
6	Universita Degli Studi Di Trento	UNITN	Italy	<a href="https://www.unitn.it/">https://www.unitn.it/</a>
7	Instituto De Telecomunicações	IT	Portugal	<a href="https://www.it.pt/">https://www.it.pt/</a>
8	UCLAN Cyprus Limited	UCLan	Cyprus	<a href="https://www.uclancyprus.ac.cy/">https://www.uclancyprus.ac.cy/</a>
9	Universidade de Vigo	UVigo	Spain	<a href="https://www.uvigo.gal/es">https://www.uvigo.gal/es</a>
10	Panepistimio Patron	UPAT	Greece	<a href="http://www.upatras.gr">http://www.upatras.gr</a>

## 1.3. Organizational Structure

- **General Coordinator:** Al-Hussein Bin Talal University (AHU).
- **Steering Committee (StC):** The StC is composed by the project general coordinator and local contact person of each partner. It will deal with the overall management and decision-making process.
- **Scientific and Supervising Committee (SSC):** The SSC is composed by two representatives from each partner. The IREEDER SSC will supervise scientific and technical activities, guaranteeing quality and sustainability of the project through the activities and outputs.
- **Quality Monitoring Committee (QMC):** The quality WP leader will form a quality monitoring committee in the framework of this Quality Assurance Plan in charge of conducting internal evaluation of the project. The QMC will organize the mechanisms to review all deliverables and reports from all other WPs from a quality point of view. QMC will also monitor the role of each partner and ensure its commitment to the project activities. The quality WP leader will deliver a total of three monitoring reports during the project eligibility period and submit them to the QMC for approval and to the Steering Committee.
- **Coordinator of each WP:** for each WP there is a coordinating institution, which provides reports to the Steering Committee for approval.
- **Peer reviewing team:** Evaluates and review each item linked to the project teaching deliverables (including syllabus, curriculum, program, contents, labs, ...).



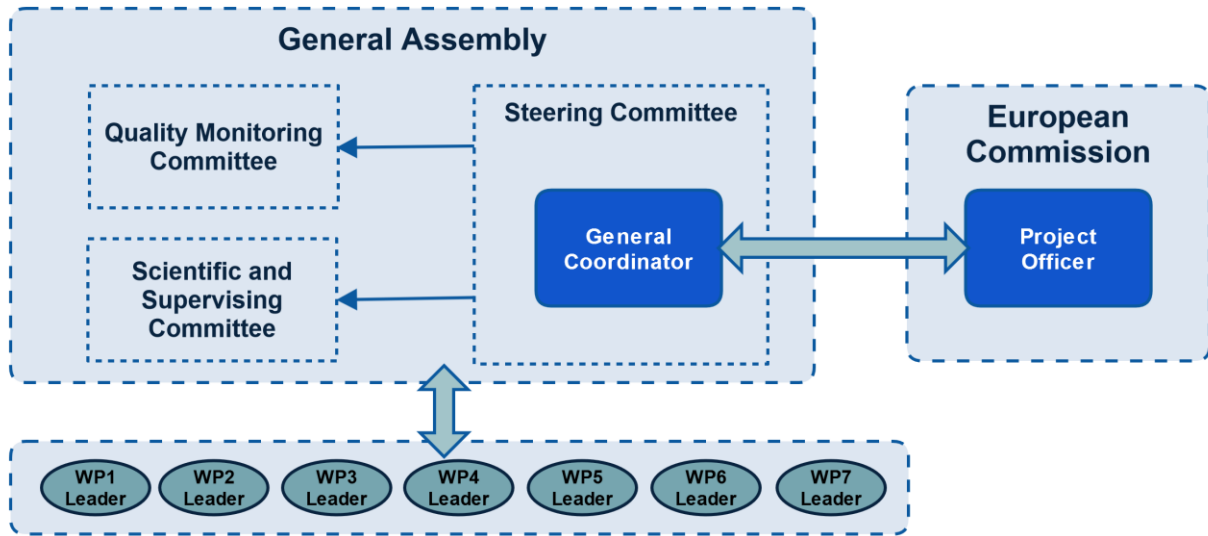


Figure 1: IREEDER Management Structure

#### 1.4. Summary of activities

For better understanding of this quality plan, the main work packages of the project are summarized. A comprehensive list of deliverables for each WP can be consulted in the project description attached to the e-form submitted and approved by the EACEA.

- **WP 1: PROJECT INITIALIZATION AND WORK PREPARATION**

- **WP 1.1: IREEDER Kick-off meeting**

The Kick-off meeting was held at AHU and for two days. The StC and SSC were formed by selecting three representatives from each partner (1 StC and 2 SSC).

All managing structures and technical activities were discussed in the meeting. The operational staff at AHU attended the meeting. A specific session was devoted to administrative staff for a clear sharing of the rules for expenditures. The memorandum of understanding (MOU) between all partners will be discussed. The memorandum of understanding (MOU) between all partners were signed.

- **Monitored Results**

- Meeting agenda
- Meeting minutes
- List of StC members
- List of SCC members
- List of QMC members

- **WP 1.2: Identifying training and teaching needs**

A report on teaching and training needs for IoT, CS and RE will be elaborated based on a questionnaire distributed among all partners and other stakeholders such as universities, students, trainees, private companies, and public administrations. More attention will be paid to the Jordanian stakeholders.

- **Monitored Results**

- Training and teaching needs report





- **WP 1.3: Verifying partners' facilities**

It will survey the facilities of all partners to ensure continuity to the IREEDER project. The survey will ask about the number of departments and students, laboratories, library, existing subjects for the project topics and their contents, number of academic staff and their previous experience, international relations, and many other facilities like video conference instruments and halls. A report will be prepared based on the results of the survey.

  - **Monitored Results**
    - Partner's facilities report
  
- **WP 2: DEVELOPMENT OF TEACHING MATERIALS**
  - **WP2.1: Report on teaching objectives and materials outline**

Following the outcomes of WP1, teaching objectives will be identified, and a summary of teaching material will be prepared. This is the base for the following deliverable and a very useful tool for both project partners and trainers themselves. Project partners will have a clear idea of the teaching objectives in the phase of preparing the teaching slides; trainers will later on benefit from this report by knowing exactly which teaching materials they shall use and how to reach the intended aims.

    - **Monitored Results**
      - Report on teaching objectives and materials' outline
  
  - **WP 2.2: Teaching materials**

An extensive analysis of existing teaching materials (mainly in Europe) about the project topics (IoT, CS, RE) will be made. Consequently, needs for updates will be identified and new material for each subject will be created. Teaching material will mainly consist of slides and sizing exercises. Most significant slides will be provided with notes explaining the contents. Slides will include text, pictures, graphics, internet links, literature references. Also, the teaching materials will include multimedia content when applicable including practical worksheets based on the developed laboratories. Part of the teaching material will address the use of simulation software.

    - **Monitored Results**
      - Teaching materials
      - Peer reviewing reports
  
- **WP 3: CAPACITY BUILDING AND TRAINING OF TRAINERS**
  - **WP3.1: Development of a capacity building plan**

This long-term capacity building plan and vision aims at developing human resources and upgrading skills and capacities of university professors, technical assistants and students in the fields of IoT, CS and RE.

    - **Monitored Results**
      - Capacity building plan report
  
  - **WP 3.2: Identification of general equipment of laboratories**

According to the contents of teaching materials, needs for practical training will be identified and the contents and equipment of laboratories to be designed at Jordanian partners will be consequently defined.

The report will mention the types of hardware and software needed. Real life implementations/projects on the fields of IoT, CS and RE shall be used for teaching reasons, to which extent students shall be free to mount components and apply changes themselves.

    - **Monitored Results**
      - Report on general equipment of laboratories



○ **WP 3.3: Training workshops in EU and training reports**

Three different training workshops will be held at the EU partners premises for selected staff from the Jordanian partners, as follows:

- IoT training workshop that will be held at UCLAN.
- CS training workshop that will be held in UVIGO.
- RE training workshop that will be held in UPAT.

Jordanian staff that have participated in the training workshops will prepare a report with the help of the trainers. The WP leader will be the responsible for delivering the reports to the project coordinator.

● **Monitored Results**

- IoT, CS, and RE workshops (participant list, satisfaction, etc.)
- IoT training report
- CS training report
- RE training report

○ **WP 3.4: Training workshops in Jordan**

Staff from Jordanian universities that have trained in EU partners will hold regular effective workshops at their own institutions as follows:

- IoT training workshop will be held AHU. Three trainees from each Jordanian partner will be involved.
- CS training workshop will be held at TTU. Three trainees from each Jordanian partner will be involved.
- RE training workshop will be held at MU. Three trainees from each Jordanian partner will be involved.

The trainees participating in these workshops will be different from those who have trained in EU.

The enrolment will be free of charge, where students, engineers, technical staff from inside and outside the universities can participate.

● **Monitored Results**

- IoT, CS, and RE training workshops in Jordan (participant list, satisfaction, etc.)
- IoT training report
- CS training report
- RE training report

● **WP 4: QUALITY ASSURANCE**

○ **WP 4.1: The first annual quality-assurance report**

The first annual quality-assurance report will be prepared by the quality monitoring committee. It will evaluate the progress of the project during its first year and monitor the commitment of all partners to the stated activities of the project.

● **Monitored Results**

- Quality Assurance Plan
- First annual quality assurance report

○ **WP 4.2: The second annual quality-assurance report**

The second annual quality-assurance report will be prepared by the quality monitoring committee. It will evaluate the progress of the project during its second year and monitor the commitment of all partners to the stated activities of the project.

● **Monitored Results**

- Second annual quality assurance report



- **WP 4.3: The third annual quality-assurance report**

The third annual quality-assurance report will be prepared by the quality monitoring committee. It will evaluate the progress of the project during its third year and monitor the commitment of all partners to the stated activities of the project.

  - **Monitored Results**
    - Third annual quality assurance report
- **WP 4.4: The mid-term evaluation report**

The external evaluator will prepare a mid-term evaluation report for the whole set of activities of the project performed in the first half of the project. It will check the compliance of the partners with the project objectives and aims.

  - **Monitored Results**
    - Mid-term annual quality assurance report
- **WP 4.5: The final evaluation report**

The external evaluator will prepare a final evaluation report for all the activities of the project performed in the whole project life span. It will check the compliance of the partners with the project objectives and aims. An open call for expression of interest to subcontract the external evaluation will be launched.

  - **Monitored Results**
    - Final evaluation report
- **WP 5: EXPLOITATION OF RESULTS AND SUSTAINABILITY PLAN**
  - **WP 5.1: Elaboration of the sustainability plan**

The methodology of the sustainability plan will depend on the following criteria:

    - Institutional viability (crediting, commitment of universities).
    - Social viability (interest of companies and training demand of students).
    - Economic viability (support from sponsors).
    - Technological viability (ensured by the web platform and by laboratories).
    - **Monitored Results**
      - Sustainability Plan
  - **WP 5.2: Students training**

Developed materials will be delivered at Jordanian universities, where an official accreditation should be commenced. Moreover, experimental activities will be carried out by students, with the help of the laboratories at three Jordanian universities as well as the virtual laboratories that will be accessible to students from all other Jordanian universities.

    - **Monitored Results**
      - Students training (participant list, satisfaction, etc.)
      - Training sessions report
  - **WP 5.3: Setup E-Learning module**

WP leader with the assistance of all partners will adapt an e-learning technology to be used for training purposes of both specialised and general modules. Students and stakeholders will have access to these on-line modules.

    - **Monitored Results**
      - E-Learning module
  - **WP 5.4: Final year graduation projects**

High calibre students from each Jordanian Partner will undertake a final year graduation project on one of the IREEDER topics.



- **Monitored Results**
  - Final year graduation projects
  
- **WP 6: DISSEMINATION**
  - **WP 6.1: Development of dissemination plan**

A dissemination plan will be elaborated by the SSC to oversee the products necessary to diffuse the project information and its results: a logo, different multilingual brochures and a multilingual video to promote the IREEDER experience. The video will be available on the project website in English and Arabic. MU will prepare the plan and will be assisted by all the partners.

    - **Monitored Results**
      - Dissemination plan
  
  - **WP 6.2: Communication plan and promotion materials**

The operational staff will elaborate the communication plan which will disseminate the project's information and results like:

    - Logo.
    - Multilingual brochures.
    - Multilingual video which will promote IREEDER results through the testimony of teachers and the trained professionals.

These will be available on the IREEDER website in English and Arabic.

    - **Monitored Results**
      - Communication plan
      - Promotion materials
  
  - **WP 6.3: The first dissemination workshop**

The first dissemination workshop will be held at MU during the fifth IREEDER plenary meeting. The achieved results of the project will be disseminated through this workshop. Invitations for all stakeholders in Jordan including universities (teaching staff, trainers, and students), public institutions and private companies will be sent. All partners and associated partners will participate in the dissemination workshop.

The main aim of this workshop is to give an overview about IREEDER and disseminate the achieved results (up to the date of the workshop) like teaching materials and the training materials.

It will encourage the creation of a network that may form the nucleus of a future association that embraces all possible IREEDER stakeholders nationally and internationally.

    - **Monitored Results**
      - The first dissemination workshop
      - First dissemination workshop report
  
  - **WP 6.4: The second dissemination workshop**

The second dissemination workshop will be held at PU during the final IREEDER plenary meeting. Invitations for all stakeholders in Jordan including universities (teaching staff, trainers, and students), public institutions and private companies will be sent. All partners and associated partners will participate in the dissemination workshop.

The main aim of this workshop is to give an overview about IREEDER and disseminate the final achieved results like teaching materials, training materials, and established labs.

    - **Monitored Results**
      - The second dissemination workshop
      - Second dissemination workshop report



- **WP 7: MANAGEMENT**

- **WP 7.1: IREEDER plenary meetings**

AHU will coordinate all plenary meetings. As scheduled, all plenary meetings will include StC meeting and SSC meeting. The fifth and final meetings will include dissemination workshops. The hosting partner will help the coordinator in organizing the meeting. The hosting partner and the coordinator will be responsible for drafting the minutes of the corresponding meeting. Seven plenary meeting will be held, three of them at Jordan and four meetings at the EU partners.

- **Monitored Results**

- Meeting (agenda, participants list, etc.)
      - Plenary meeting minutes

- **WP 7.2: IREEDER website and communication platform**

AHU designed the project website and will continuously update its contents for the lifetime of the project. The project website will establish a communication platform for project partners, for dissemination purposes, as well as for the material contents and laboratories for students. All deliverables will be uploaded to the website in a specific section of project results.

- **Monitored Results**

- IREEDER website and communication platform

- **WP 7.3: Financial auditing report**

During the project lifetime, an external independent auditor will be involved in certifying the expenditures occurred within the project. Its necessary role will be presented to all partners in order to share the responsibility of correct spending.

The external auditor will issue a final auditing report by the end of the project.

- **Monitored Results**

- Financial auditing report



## 2. Quality Assurance Plan

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The QAP for the IREEDER project will be structured to ensure that quality is planned for all project activities and deliverables. It focuses on two levels of quality assurance, internal and external, with the purpose of conducting a follow-up, monitoring and evaluation of all project outputs making sure that the project is implemented in a cost, effective, efficient and timely manner.

It will review the quality of the project outputs in the light of the quality indicators approved by all the partners. The monitoring of the project progress and quality of outputs in each WP will ensure a high quality of project outcomes and will guarantee the compliance of project results with project objectives.

The QAP is structured as described below.

### 2.1. Quality Management Committee (QMC)

The QMC will be established at an early stage of the project implementation and will consist of one senior representative from both regional and European partners. The QMC will be the main strategic body for quality control and monitoring of the project outputs. It will monitor and evaluate the quality of the planned project results against established qualitative and quantitative indicators of progress. Its main purpose is conducting an evaluation of analytical materials produced by the project consortium under the work packages. Each QMC contact person will be also in charge of disseminating the QAP in his/her institutions, following the day-to-day activities using the work plan and logical framework matrix as documents of reference, and finally, and making sure that all project deliverables are submitted on time to the work package leaders.

The work will be mainly undertaken through online communication tools (e-mail, videoconference meetings, etc.). The Quality Management Committee will produce recommendations on a regular basis in correspondence with the project and the QAP. Reports can take the form of e-mails, power-point presentations, Word or PDF documents.

The QMC will also meet during project coordination meetings for cost-efficiency purposes, as follows:

- Two meetings during the first year, scheduled in months 1 and 7.
- Two meetings during the second year, scheduled in months 13 and 19.
- Third meetings during the third and last year, scheduled in months 25, 31 and 36.





	Quality Management Committee		E-mail	Phone/WhatsApp	Videoconference ID
1	<b>AHU</b>	Saud Althunibat			
2	<b>MU</b>	Ziyad Altarawneh			
3	<b>TTU</b>	Ahmed Aljaafreh			
4	<b>PU</b>	Omar Daoud			
5	<b>IU</b>	Mohammad Siam			
6	<b>UNITN</b>	Fabrizio Granelli			
7	<b>IT</b>	Jonathan Rodrigues			
8	<b>UCLAN</b>	Marios Raspopoulos			
9	<b>UVIGO</b>	Felipe Gil-Castiñeira			
10	<b>UPAT</b>	Andreas Kazantzidis			

## 2.2. Peer Reviewing Team

The peer reviewing team will evaluate each item related to the different training and teaching deliverables (syllabus, curriculum, program...). The team will use predefined criteria tables and scores prepared by the QMC.

## 2.3. Work package leaders

Each project activity has a designated responsible partner that will look after its implementation by offering guidance and monitoring to the rest of the partner institutions involved in the activity.

Work Package	Type	Name	Coordinator
<b>WP 1</b>	Preparation	Project initiation and work preparation	UNITN
<b>WP 2</b>	Development	Development of teaching materials	UCLan
<b>WP 3</b>	Development	Capacity building and training of trainers	UPAT
<b>WP 4</b>	Quality Plan	Quality Assurance	UVigo
<b>WP 5</b>	Dissemination & Exploitation	Exploitation of results and sustainability plan	IT
<b>WP 6</b>	Dissemination & Exploitation	Dissemination	MU
<b>WP 7</b>	Management	Management	AHU



### **3. QAP Methodology**

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This section describes the main steps in establishing control measures for quality assurance. The monitoring and evaluation of the project will take into account the measures of European standards and guidelines for quality assurance.

The implementation of the QAP will be based on the following methodology.

#### **3.1. Internal Monitoring of Project Results conducted by each partner institution**

This level of monitoring and evaluation of activities implies that each partner institution will monitor the deliverables produced in their institutions before submitting them to the activity leader and/or to the project coordinator.

The person responsible for this will be the member of the Quality Monitoring Committee (QMC). In this sense, they will supervise and monitor the quality of all project deliverables made by their colleagues.

#### **3.2. Project Monitoring and Evaluation of Project Results**

This level of Monitoring and Evaluation of project results is divided into two main sections:

##### **3.2.1. To monitor and assure the quality of the project activities.**

The partner responsible is the University of Vigo (UVigo), the leader of the Quality Monitoring Committee and leader of the quality WP.

Tools, such as questionnaires and surveys, will be developed to monitor and assure the quality of the training materials and outputs, according to the expected results in each work package. The general satisfaction of consortium meetings and the active participation of partners will be evaluated with questionnaires or other tools.

A report will be produced after each training activity summarizing the participant's opinion and providing information on quality aspects that can be improved for subsequent training workshops. Minutes will be also produced after each consortium meeting and surveys analysed by the Quality Monitoring Committee.

##### **3.2.2. To monitor and evaluate the project progress.**

The entity in charge of conducting this level of Monitoring and Evaluation will be the Quality Monitoring Committee (QMC), and will follow the lead of the University of Vigo.

The QMC will be in charge of conducting three evaluation reports (one per period, starting 15<sup>th</sup> November 2019) to review the impact, sustainability and effectiveness of all the project activities and outputs created in the framework of the IREEDER project. The QMC will be also entitled to provide some recommendations to correct any possible deviations that can affect the project expected outcomes.

The project, given its design and objectives, contains quantitative and qualitative indicators to check if the work is being completed with quality, as follows:



Activities	Deliverable/Results/ Outcomes	Deadline for delivery	Target groups/potential beneficiaries	Quality quantitative indicators	Quality qualitative indicators
WP1 1.1 IREEDER Kick-off meeting	Meeting agenda Meeting minutes List of StC members List of SCC members		Stakeholders in academic institutions (students, professors, researchers...) and industrial sector (engineers, technical staff, employers)	Number of partners attending the kick-off	To hold the kick off meeting at AHU.  To form the StC and SSC  To distribute tasks within each partner.  To define a general cooperation methodology
WP1 1.2 Identifying training and teaching needs	Training and teaching needs report	15/2/2020	Teaching staff  Students  Trainees	Number of questionnaires sent to educational institutions	Comprehensiveness (sampling, including different target groups)  Delivering the report on time
WP1 1.3 Verifying partners facilities	Partner's facilities report	15/2/2020	Teaching staff  Students  Trainees  Administrative staff  Technical staff  Librarians	Number of questionnaires sent to educational institutions	Comprehensiveness (sampling, including different target groups)  Delivering the report on time
WP1 2.1 Identification of teaching objectives and materials outlines	Report on teaching objectives and materials' outline	15/6/2020	Teaching staff  Students  Trainees	Identified objectives  Identified materials	Complete list of objectives outline  Complete list of materials outline  Adequate organization/structure  Clarity
WP2 2.2 Preparing the teaching materials	Teaching materials  Peer reviewing reports	15/6/2021	Teaching staff  Students  Trainees	Number of topics addressed  Number of participating experts  Accumulated years of experience of the experts  Number of reviewers	Quality of the contents (text, figures, multimedia, etc.)  Completeness of the peer review reports  Correspondence between teaching objectives, material outlines and prepared materials  Adequate organization/structure
WP3 3.1 Development of capacity building plan	Capacity building plan report	15/11/2020	Teaching staff  Students  Trainees		Clear objectives  Clear steps  Delivering the capacity building plan on time
WP3 3.2 Identification of laboratories equipment	Report on general equipment of laboratories	15/03/2021	Teaching staff  Students  Trainees	Number of potential workshops that can be implemented with the equipment  Number of students that can use the equipment at the	Comprehensive list of equipment  Clear relation with learning objectives



				same time	Related to workshop requirements Delivering the report on time
WP3 3.3 IoT training workshops in UCLAN CS training workshops in UVIGO RE training workshops in UPAT	IoT, CS, and RE workshops  IoT training report  CS training report  RE training report	15/12/2021	Teaching staff  Students  Trainees	Number of trainees attending	Detail and clarity of the training reports  Satisfaction of the participants  Participants obtain clear instructions to implement the courses  Delivering the training reports on time
WP3 3.4 Holding trainings workshops in Jordan.	Training workshops in Jordan  Training workshop report (one report for workshop)	M30 M32 M34	Jordanian faculty members  Students  Trainees  Technical staff	Number of trainees attending  Number of held workshops	Detail and clarity of the training reports  Satisfaction of the participants  Participants obtain clear instructions to implement the courses  Delivering the training reports on time
WP4 Quality Assurance	Quality Assurance Plan  4.1 The first annual quality report assurance  4.2 The second annual quality assurance report  4.3 The third annual quality assurance report  4.4 The midterm evaluation report  4.5 The final evaluation report	15/3/2020  15/11/2020  15/11/2021  15/11/2022  15/4/2021  14/11/2022	Teaching staff  Students  Trainees		Delivering all reports on their scheduled time  Organization  Clarity
WP5 5.1 Elaboration of the sustainability plan	Sustainability Plan	15/1/2022	Teaching staff  Trainees		Delivering the sustainability plan on time
WP5 5.2 Students training	Students training  Training sessions report	14/11/2022	Teaching staff  Students  Trainees	Number of training workshops  Number of attending students	Detail and clarity of the training reports  Satisfaction of the participants
WP5 5.3 Setting up E-learning modules	E-learning module	15/7/2022	Teaching staff  Students  Trainees	Number of e-learning modules set up	Satisfaction from users of the module
WP5 5.4 Commencing final year graduation projects	Final year graduation projects	15/11/2022	Teaching staff  Students  Trainees	Number of graduation project accomplished  Number of students	
WP6 6.1 Development of dissemination plan	Dissemination Plan	15/6/2021	Teaching staff  Students  Trainees		Delivering the dissemination plan on time  Clear objectives  Clear tasks



WP6 6.2 Communication plan and promotion materials.	Communication plan Promotion materials	15/11/2021	Teaching staff Students Trainees General public	Number of promotion materials Number of communication channels established for dissemination purposes Number of communications (posts, tweets, videos, etc). Number of followers for each communication channel	Feedback about the communication plan Impact
WP6 6.3 Holding the first dissemination workshop	The first dissemination workshop First dissemination workshop report	15/6/2022	Teaching staff Students Trainees	Number of stakeholders attending the dissemination workshop	Feedback about the workshop
WP6 6.4 Holding the second dissemination workshop	The second dissemination workshop Second dissemination workshop report	15/11/2022	Teaching staff Students Trainees	Number of stakeholders attending the dissemination workshop	Feedback about the workshop
WP7 7.1 Coordinating plenary meetings.	Plenary meetings minutes	M1 M7 M13 M19 M25 M31 M36	All the project partners	Number of participants in plenary meetings	Meetings minutes
WP7 7.2 IREEDER website and communication platform	IREEDER website and communication platform	15/3/2020	Teaching staff Students Trainees Technical staff	Number of visitors and their feedback Number of contents published	Organization Transparency Usability
WP7 7.3 Financial auditing	Financial auditing report	14/11/2022	Administrative staff		Delivering the financial auditing report on time

The deliverables are evaluated according to the requirements listed in the project application as indicators of progress:

- Producing the new teaching materials to the undergraduate curriculum.
- Establishing the necessary laboratories in the Jordan partners.
- Holding the training workshops in Europe and then in Jordan.
- The availability of the teaching materials for all stakeholders.
- Acceptance of the new programmes by the participating HEIs.
- Accreditation of the new curricula in national level.
- Increased collaboration among HEIs in Partner & EU countries:
  - o New teaching methodologies in RE, IoT and CS
  - o Number of members of the network
  - o Number of students enrolled
  - o Number of agreements with market stakeholders for enhancing employment opportunities
- Creation and using of IREEDER platform.



- Increase number of employed graduate students in RE, IoT and CS fields.

Overview of short- and long-term impact indicators:

Short term impact Qualitative indicator	Target groups/potential beneficiaries	Quantitative indicators	Qualitative indicators
Study of present educational materials of the involved topics	Educational institutions	Number of Questionnaires send to educational institutions	Feedback from Educational institutions
To promote the involved topics materials in Jordan and expose its advantages to the teaching methods	Educational institutions	Number of universities adopt the materials	Improve quality of taught courses
Quality of delivered materials	Educational institutions, trainees, and students	Number of materials developed / adapted	Number of students pass the subject and Feedback from students based on questionnaire
To train Jordanian university lecturers on teaching technologies	University lecturers	Number of university-trained lecturers	Successful training of staff

Long term impact Qualitative indicator	Target groups/potential beneficiaries	Quantitative indicators	Qualitative indicators
To accredit the developed materials in the undergraduate curriculum	Universities in Jordan, lecturers and students.	Number of universities accredit the subjects	Feedback from faculty members and students
To establish an e-learning platforms to ensure sustainability of the project	Universities in Jordan, Lecturers, students, Stakeholders and interested individuals	Number of users And number of subjects taught	Feedback from users based on questionnaire
To share the results and resources of the project in the wider community by building an online database that includes the project outcomes and metadata	Universities in Jordan, Lecturers, students, Stakeholders and interested individuals	Number of users, Number of uploaded e-courses over the network and universities members joined the projects	Frequency of using the uploaded materials.

### 3.3. External Evaluation

An external evaluator will be appointed after launching an open call for expression of interest by the University of Vigo. The external evaluator activities will include, among others, review of all project results and documents provided by the coordinator, analyse of quality reports produced by the Quality Monitoring Committee, contact with project partners and evaluation of the mid-term and final reports elaborated by the consortium. Quality control involves the adjustment of the quality plan according to the outcomes of the quality monitoring process. Two external quality evaluation reports, mid-term and final, will be prepared and delivered to the coordinator of the project by the external evaluator. The external evaluator will present the reports on-line during project consortium meetings.



The following requirements should be taken into consideration while selecting the external evaluator:

- An adequate experience in the teaching and research of the IREEDER topics.
- An adequate experience in managing EU projects.
- Ability to monitor all activities of IREEDER project including training workshops in Europe, and dissemination workshops in Jordan. In addition to assess the developed teaching materials, and the established laboratories in Jordan.



## 4. QAP Tools

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Quality Assurance Tools like surveys, questionnaires or qualitative interviews is not only about assessing results or gaining information. QA tools have the ability to foster engagement, build commitment and accountability to the project and the project partners.

However, finding the fine line between gathering sufficient data for monitoring project progress and being the source of additional work that is not perceived as extra workload (yet another survey?!) is the key to find the right set of QAP tools.

The QAP tools will be based on qualitative data (surveys and semi-structured interviews during project meetings) and quantitative data (mainly questionnaires). Data will be gathered from all project partners and key stakeholders.

The main QAP tools for the IREEDER project are:

- The Quality Plan (it may be updated following the needs that may arise during the project life in order to succeed in the foreseen deliverables).
- Online or paper questionnaires to evaluate project events, trainings and consortium meetings (see Annex 5).
- Quality project progress reports: 3 reports in total (one for each period starting 15<sup>th</sup> November 2019) and 2 external evaluation quality reports.
- Project deliverables review and availability of project results in the project website under the section results.
- Minutes for project consortium meetings.



## 5. Risk Management Plan

The risk management section of this document outlines the policies and the procedures for identifying and handling uncommon causes of project deviations that may compromise objectives, i.e. risks.

Risk management is concerned with identifying potential problems and eliminating or reducing the damage of the realization of those risks would cause, as failure to adequately manage them will threaten the success of the project. It is usually impossible to eliminate all risks, but they can be recognised and dealt with. The risk management process requires that each risk is assessed and measures formulated to prevent it (avoidance actions) or minimize its effect (amelioration actions). Both need to be considered because avoidance measures may fail.

As the project proceeds, the nature of risks changes and so does their impact. Consequently, risk management is a continuous process that takes place (and is updated) throughout the project lifecycle as unexpected sources of risk can be identified at any time. Risks should be regularly reviewed and reassessed, which is why it is important to devise a well-planned approach to risk control, which will allow the project team to concentrate resources in those areas where risk is high, and reduce risks to acceptable limits.

The different stages of risk management are as follows:

- Risk identification (i.e., identify and describe the risks of any nature that might occur in the project)
- Risk analysis (i.e., analyse likelihood and consequences of risks, determine magnitude/acceptability of risks for the project)
- Risk monitoring (i.e., identify the measures that may be necessary, if relevant, to offset or prevent the occurrence of that risk,)
- Risk control (i.e., monitor, track and review risks and mitigation actions)

In Figure 2 a schematic representation of the risk management process in IREEDER is shown.



Figure 2 IREEDER Risk Management

Depending on the level, risk management is the responsibility of the following:

- Project level → coordinator and Steering Committee
- WP level → WP leaders
- Deliverable level → deliverable leader and authors

Risks can be either internal or external in nature: internal risks can be dealt with the project, provided that they are identified and that appropriate actions are taken; external risks concern matters outside the direct control of project management and can be best dealt with by continuous information acquisition, active dissemination, and communication with central stakeholders in each participating country.

Risk assessment includes both the identification of potential risk and the evaluation of the potential impact of the risk, which can be expressed quantitatively or qualitatively. Once a risk has been identified a probability of occurrence will be assigned to it. Once assessed, the risk should be evaluated to determine the likelihood of the risk or threat being realised and the seriousness, or impact, should the risk occur. Significant risks are those that have a high likelihood and can cause a severe impact on the successful implementation of the project and endanger the goals for sustainability. A careful determination of a mitigation strategy will then follow.

## 5.1. Risk management stages

### 5.1.1. Risk Identification

Risk identification is conducted throughout the life-cycle of the IREEDER project. The following shall be considered as tools and techniques for risk identification for IREEDER Project:

- Analysis of deliverable status
- Analysis of WP schedules and scopes
- Monitoring WPs activities and deadlines
- Regular communication of the Management team with the WP leaders

The risks will be listed in a risk management register by the Project Manager, which will be accessible to all members through the project's file manager. The risk management register contains the following information: Risk Number, Description, concerned WP and Proposed risk-mitigation measures.

### 5.1.2. Risk Analysis

The exposure to a given risk is estimated using the risk matrix in Figure 3. Concerning each of the risks, the Project Manager, in collaboration with the WP leaders, will estimate the likelihood they could become problems (Low/Medium/High).

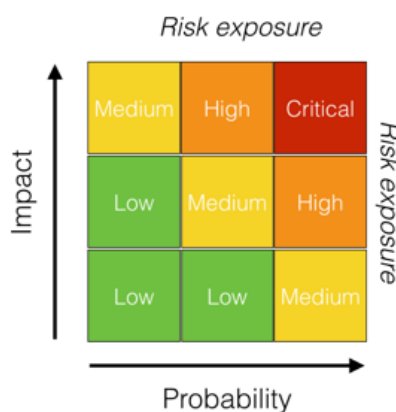


Figure 3 – Risk matrix

### 5.1.3. Risk monitoring

After the assessment stage, the risks need to be treated, particularly if the risk is realised. The risk treatment often involves developing a range of options for controlling, mitigating, and preparing contingency actions for the risks. As the potential impact of the risks can be treated differently, different options for risk management can be adopted. For example, low-level risks can be accepted by the organisation without any additional action; medium level risks should be monitored and treated and the need for actions are related to organisation's strategies, acceptance and tolerance for risks; the high impact risks should always be treated with care and a set of administration and management actions in place in order to mitigate the high impact risks. For the high impact risks detailed contingency plans should be developed. IREEDER contingency plans have been drafted for all identified risks.

### 5.1.4. Risk control

Each partner is responsible for executing the risk mitigation activities which relate to the WP they lead. If a mitigation action cannot be effectively carried out or does not solve the risk, the risk exposure is likely to become more important. In this case, visibility of the risk has to be highlighted by the Project Coordinator and the mitigation measure modified in an efficient way.

An item can be considered closed when the following criteria are brought together: the risk-mitigation measures have been implemented and a new exposure risk is estimated as low using the risk Matrix.

## 5.2. Risk management table

IREEDER identified risks, which are listed in Table below, which will be available in the project's internal platform and updated at least at the end of each reporting period by all partners.

Risk Number	Description of Risk	WP	Proposed risk-mitigation measures	Did you apply risk-mitigation measures?	Did the risk materialize?
<b>Project Management Risks</b>					
<b>R1</b>	Lack of overall coordination <i>Probability low; Impact medium</i>	7	Effective coordination is ensured by the managerial structure and through the project work plan. The coordinator has extensive experience in coordinating research and training collaborative projects. In case of unforeseen events, other experienced persons at the coordinating institute or at other partners can take over coordination tasks.		
<b>Consortium Risks</b>					
<b>R2</b>	Consortium disruption <i>Probability low; Impact low</i>	All	All partners have experience and proven track records in large collaborative R&D and training projects. All are motivated to reach the project objectives, which have been defined in the common interest of all partners. Any partner not adhering to this common interest will be treated according to the project agreement with EACEA and the partnership agreements.		
<b>R3</b>	Partner failure <i>Probability low; Impact low</i>	All	All partners constitute medium to large institutes with strong in-house scientific communities and with secured public and private funding streams. Chances of sudden partner failure are considered minute and highly unlikely. Nevertheless, should this occur, participation of the affected partner can be terminated and the consortium can redistribute tasks and obligations over the remainder of the partnership; the large project partnership will easily accommodate this.		
<b>R4</b>	Weak contribution / commitment from a partner to the project <i>Probability low; Impact low</i>	All	Any weak participation from any of the partners should be reported to the Project Coordination by the responsible WP leader. A decision should be taken by the Steering Committee to encourage the partner to commit to the project activities. Otherwise, the financial budget of the corresponding partner should be reduced or stopped, should the problem escalate.		
<b>R5</b>	Conflicts in the Consortium	All	A comprehensive partnership agreement will be signed by all partners. The PM with the Steering Committee will follow strict administrative guidelines and implement actions against		



	<i>Probability low; Impact low</i>		partners failing to comply with procedures detailed in the agreement. All partners have a track record of solving emergent problems in a collegial spirit.		
<b>Implementation Risks</b>					
<b>R6</b>	Delays in deliverables <i>Probability medium; Impact medium</i>	All	The PM will install the tools necessary for effective monitoring of project progress. A system will be implemented to spot delays of critical deliverables early; mitigating actions will be discussed with partners involved to keep the project on time. Partners in WPs will appoint project personnel in time. When they possess spare capacity, failure of one will be mitigated quickly at others. Moreover, the whole framework of the project is focused on solving emergent problems collectively and harmoniously.		
<b>R7</b>	Coordination problems within individual WPs <i>Probability low; Impact low</i>	1-6	Most WPs involve multiple partners, which collaborate to achieve their tasks in a timely manner. To achieve this, the work has been partitioned into internally coherent tasks. Task-leaders and WP-coordinators will monitor progress and flag problems in a timely manner to enable harmonious mitigation.		
<b>R8</b>	Ineffective collaboration among WPs <i>Probability low; Impact low</i>	1-6	The essence of this project is that WPs collaborate. The required collaboration will be ensured through a strong internal communication structure fostered and aided by the management WP, ensuring effective information flow.		
<b>R9</b>	Lack of effective and efficient communication routines within the consortium may result in deterioration of the project work. <i>Probability low; Impact low</i>	All	Regular teleconferences are to be held in addition to physical consortium meetings. In all meetings, regular updates and progress reports will be given and all partners should discuss any sensitive issues to ensure that allocated tasks progress as expected. Project partners have agreed in the description of work what they are responsible for in terms of allocated tasks. In a critical situation, the project partners need to be guided to conduct rearrangements of schedules and deliverable submissions.		
<b>Dissemination Risks</b>					
<b>R10</b>	Low level of dissemination activities <i>Probability low; Impact medium</i>	5, 6	The dissemination plan is specified in the description of work with input from all partners. The dissemination activities must be checked regularly, defining responsibilities, collaborations and targeted outcomes. Periodic teleconferences will be held to manage the dissemination activities and to unblock any identified situation if necessary.		
<b>Quality Assurance and Risk Management Risks</b>					
<b>R11</b>	Failure of Quality Assurance & Risk Management <i>Probability low; Impact high</i>	4	In case this risk occurs, the reason for a failure of the methodology needs to be identified. The situation will be assessed by the Steering Committee of the project, in collaboration with the involved WP leaders, to decide about adequate actions that assure the overall project result. The quality assurance and risk management methodology are based on established methodologies that have been successfully used in many European projects. The regular reviewing of the quality of the results and potential risks allows the identification of any possible problems/risks at an early stage so that solutions can be elaborated in time. In addition, the consortium partners are very interested and committed to the project. That reduces the risk of low quality results and failures of the risk management and quality assurance.		
<b>Impact Risks</b>					
<b>R12</b>	Jordanian partners are not able to adopt or experience delays in the adoption of the developed subjects into their curricula <i>Probability low; Impact high</i>	5	An official commitment from all Jordanian partners should be delivered to the Project manager (AHU) stating the procedure to accredit the developed subjects in their own programs. The expected time to accomplish the official accreditation should be stated as well.		
<b>R13</b>	Weak interest in the project from the stakeholders especially the industrial firms in	5	The weak involvement of the local industrial firms in Jordan can be mitigated by doubling the dissemination efforts to attract their attention to the expected revenue of the project. A tour for the possible interested stakeholder might be performed by the		



	Jordan  <i>Probability low; Impact medium</i>		Jordanian partners.		
<b>R14</b>	Weak interest of the students in the developed subjects.  <i>Probability low; Impact high</i>	5	The attention of students can be attracted by disseminating the benefits of the developed subjects to the future carrier of the students.		
<b>R15</b>	Low involvement of faculty staff in the project activities.  <i>Probability low; Impact high</i>	5	The engagement of faculty staff can be motivated by disseminating detailed information on the developed subjects and providing adequate training.		
<b>Budget Risks</b>					
<b>R16</b>	The allocated budget is not enough to purchase the lab equipment.  <i>Probability low; Impact medium</i>	3	Regarding to the extra expenses for purchasing the lab equipment, partners will look for local or international fund to cover the extra amount of money. Also, self-funding by the corresponding partner itself is feasible.		
<b>R17</b>	Jordanian partners are unable to allocate the space (rooms) to establish the labs  <i>Probability low; Impact low</i>	3	Jordanian partners have already committed to reserve the necessary space to install IREEDER labs in their institutions. In case that space is not enough or not available at the time of installation, equipment can be installed in a temporary location (inside the partner institution) or co-located with another laboratory. Partners will look for a local funder to build the necessary space/rooms.		
<b>External Risks</b>					
<b>R18</b>	Political stability of Jordan and the area will affect the mobility of the project partners and the implementation of the project.  <i>Probability low; Impact low</i>	All	The risk related to the political and security issues which might prevent Jordanian trainees to travel to Europe can be mitigated by either by deferring the corresponding workshops or by online courses and training.		
<b>R19</b>	Partners are hindered from travelling and attending meetings due to problems related to travel constraints and visa issues.  <i>Probability low; Impact low</i>	All	For training workshops to be held at the EU partners, involved JO staff will apply for visa two or three months in advance to avoid any problems. The JO partners should have a spare list to replace any person who could not get the visa. In case of lack of time, the online attendance is a feasible option.  If the EU host partner of a training workshop cannot hold the training workshop or the majority of the JO staff cannot attend the meeting due to force majeure reason, the workshop can be delayed, or located in another EU partner. In case that none of EU partners can hold the workshop and the project in its third year, the training workshops can be held online.  For plenary project meetings, if a partner or more (less than the majority) cannot attend the meeting, the non-present partners can attend the meeting by an online participation. However, if the majority of partners cannot attend a meeting, the Steering committee will specify another date to locate the meeting. If the problem of not attending the meeting is the location, the steering committee will select another partner to host the meeting. If the majority of the partners cannot attend the meeting or none of the partners can host the meeting due to force majeure reasons, the consortium can have the meeting in a fully remote mode.		







## 6.2. Meeting Satisfaction Surveys

Introducing Recent Electrical Engineering Developments into undergraduate curriculum / IREEDER  
609971-EPP-1-2019-1-JO-EPPKA2-CBHE-JP

**Meeting Place:** .....  
**Meeting Date:** .....

1. PARTICIPANT IDENTIFICATION					
Institution profile: <input type="checkbox"/> Project Partners <input type="checkbox"/> Associate member <input type="checkbox"/> Other (specify): .....					
2. ORGANISATION					
- Meeting length: Too short <input type="checkbox"/> Too long <input type="checkbox"/> Reasonable <input type="checkbox"/>					
- Class the following aspects (1 – weak / 5 – excellent):					
Dates selected by the coordinators to call for this meeting	1	2	3	4	5
Information shared before the meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Information provided during the meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Everyone could contribute in the same level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All key issues have been presented/discussed during the meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Linguistic competences of all representatives have been taken into consideration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The meeting has contributed to clarify/solve the doubts and questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of the organisation by the coordinator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
General perception regarding the organisation of this meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assess the meeting according to your expectations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. SATISFACTION					
- Evaluation of the profitability of this meeting (1 – fair / 5 – excellent):					
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5					
- Have you encountered any problem/difficulty before/during/after the meeting affecting the result					
<input type="checkbox"/> Yes <input type="checkbox"/> No					
If the answer is “yes”, please specify: .....					
Please, evaluate the following aspects related to the meeting (1 – fair / 5 – excellent):					
Global Satisfaction	1	2	3	4	5
Logistic aspects (accommodation, food ...)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>• What are the most positive aspects arising from the meeting?</li> <li>• Are there any negative aspects to point out?</li> <li>• Any suggestions regarding the organisation to take into account for future events?</li> </ul>					





### 6.3. Annual Satisfaction Survey on Overall Project Management.

Introducing Recent Electrical Engineering Developments into undergraduate curriculum / IREEDER

609971-EPP-1-2019-1-JO-EPPKA2-CBHE-JP

<b>1. IDENTIFICATION</b>	
Partner University: ..... Country: .....	
Institutional Profile: <input type="checkbox"/> Project Partner <input type="checkbox"/> Associate Member <input type="checkbox"/> Other (specify): .....	
<b>2. EFFECTIVENESS OF THE COMMUNICATION PROCESS WITH COORDINATION</b>	
- Classify the following aspects (1 – very unsatisfied / very – satisfied):	
3 4 5	1 2
How quickly does the coordinator provide an answer?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
How works the different levels of communication of all partners are taken into account?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
How effective are the answers provided by the Coordinator?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
How effective are the answers provided by the Coordinator in case of complaints?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
How is the effectiveness of the coordinator's response when suggesting improvements?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Which is the overall satisfaction with the coordinator's communications (e-mail, phone, social media)?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Please, indicate any suggestions to improve the communication process of the coordinator: .....	
<b>3. DECISION MAKING AND ORGANISATION OF PROJECT ACTIVITIES</b>	
- Classify the following aspects (1 – very unsatisfied / 5 – very satisfied):	
2 3 4 5	1
Clarity of the project work plan and work packages for each partner	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Deadlines set by the coordinator	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Good communication periodicity among the partners for exchanging project materials	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
All partners were contacted about important decision making process	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
All different partner representatives were authorised to participate in decision-making processes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
All partners were aware of both the project objectives and each partner's objectives	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
All partner representatives were informed about their responsibilities	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
If appropriate, please indicate any suggestion to improve the decision-making process and the organisation of project activities: .....	
<b>4. ECONOMIC MANAGEMENT OF THE PROJECT</b>	
- Are the payments made in accordance with the signed partnership agreement?	<input type="checkbox"/> Yes <input type="checkbox"/> No
- The payments made to the partner institutions were according to the original plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No
- Were the payments to partners made in a reasonable period of time?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If appropriate, please indicate any suggestion to improve the economic management of project: .....	
<b>5. OVERALL MANAGEMENT OF THE PROJECT</b>	
- Classify the following aspects (1 – low / 5 – excellent):	
1 2 3 4 5	
The promotion of team work, the share of good practices and expertise	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Clarity of roles and responsibilities	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Clarity of project management and guidelines	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Overall project management	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
If appropriate, please indicate any suggestion to improve the overall management of the project .....	



### 6.4. Questionnaires for Training Workshops

Introducing Recent Electrical Engineering Developments into undergraduate curriculum / IREEDER

609971-EPP-1-2019-1-JO-EPPKA2-CBHE-JP

Meeting Place: .....

Meeting Date: .....

<b>1. IDENTIFICATION</b>					
Partner University: ..... Country: .....					
<b>2. HOST UNIVERSITY</b>					
How did you obtain information about the host institution? Project Website / Coordinator / Host institution / Press release / Other (please specify): .....					
Indicate how useful were the information received to prepare your trip to meeting venue. Please, rate the following aspects: (1 – low / 5 – excellent)					
Information available on the project website	1	2	3	4	5
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Information available on the host institution website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify): .....					
Please rate the support and guidance received before you travelled to the host institution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If appropriate, please indicate any suggestion that would help to improve the communication process with the host institution: .....					
<b>3. CONTENT OF THE TRAINING WORKSHOP</b>					
Please, rate the following aspects: (1 – I disagree / 5 – I fully agree):					
The training workshop / seminar was important to improve my capacities	1	2	3	4	5
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The content of the training workshop / seminar was interesting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I think that the scope and objectives of the training workshop / seminar were in line with the duration of the activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I believe that the conditions of the meeting venue (location, equipment, topic, target group, audience) were satisfactory.					
Theoretical Content	1	2	3	4	5
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Practical Content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If appropriate, please indicate any suggestion that would help to improve the content of the training workshops: .....					
<b>4. QUALITY OF THE TRAINING WORKSHOPS</b>					
Please, rate the following aspects: (1 – I disagree / 5 – I fully agree):					
I believe that the lecturer organised the content correctly	1	2	3	4	5
Theoretical Content					
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Practical Content					
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I believe that the training workshop / seminar was well organised (ability to ask questions, participants' motivations, ...)					
I believe that the methods used by the lecturer were appropriate					
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If appropriate, please indicate any suggestion that would help to improve the quality of the training workshops: .....					