



# WP6.4 External Quality Report (M24) April 2023





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Project acronym	Eco-Car
Project full title	Vocational Training Diploma on Electrical and Hybrid Vehicles
WP No & Title	WP6 External Quality Report
Author	External Evaluator: Sandra Marcos
Distribution level	Partnership
Total number of pages	38
Version	1
Language	English

#### **Revision History**

Version	Date	Description	Action	Page(s)
1	24/04/2023	Original document	С	38

(\*) Action: C= creation, I=Insert, U=Update, R=Replace, D=Delete

#### Disclaimer

This project has been funded with support from the European Commission. The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.





#### 1. INTRODUCTION

This report includes the external annually review of project progress taking into account the results from the quality evaluations done in the second year of the Eco-Car project (01/01/2022 to 30/03/2023), the Quality and Monitoring Report (M18 and M24), the progress reports of the different work packages (WP), the Work Plan, the Logical Framework Matrix and the information about each WP provided in the project and during the Steering Committee Meeting held in Deusto University on the March 2023.

To evaluate the progress of each WP, the progress reports, the evidence provided by the project through Google Drive and the information of the project proposal have been analyzed.

This report has been drafted taking into consideration the following 5 aspects: relevance, efficiency, effectiveness, impact and sustainability.

#### 2. PROJECT OBJECTIVES

The general objective of the project is to enhance the competencies and skills in the field of Electrical and Hybrid Vehicles and promote the socio-economic development in Jordan.

According to the logical matrix the following specific objectives are expected to meet:

- 1. Satisfying industry and economical needs by empowering engineers.
- 2. Increase the employability of Engineers in Local and International Market through training the mon the needed skills in the field of EV and HEV
- 3. Enhance the quality of provided vocational training provided in the vocational training centers, through employing the trained engineers in those centers, this could be achieved within the project through signing cooperation agreements with these training centers.
- 4. Improve the level of provided services for repairing and maintaining electric and Hybrid vehicles in Jordanian enterprises.
- 5. Helping to move Jordan forward to become a host for Electrical and Hybrid vehicles industry in future.
- 6. Supporting the University Enterprise cooperation through doing internships in vehicles companies.
- 7. Develop a new culture of working relationships among HEIs and enterprises to allow HEIs better integration within the larger society.
- 8. True collaborative efforts with enterprises to provide student support from practical placement, entrepreneurship and employability that should allow graduates to develop capacities that guarantee greater success when joining the labor market.





- 9. Implement new andinnovative learning andpedagogical approachesto offer high quality education.
- 10. Graduates with a cultural, environmental and social identity to mitigate climate change impacts.

#### 3. ASSESSMENT OF PROGRESS OF WORK PACKAGES

#### WP1. Establishing university-enterprise cooperation

#### Aims and objectives

The objectives are to establish strong and lasting cooperation between universities, enterprises, and vocational training centers. This type of cooperation will help universities better understand what the expertise and qualifications for their students in HEV/EV issues should be in order to succeed and get hired once graduating. Another goal is to understand what steps and tools to be implemented in order to further advance the adoption of clean technologies in Jordan.

1.1 Establishing EV/HEV Vehicles Network	
Type	Event/Report
Due date	14/07/2021
Decembelles	

#### **Description:**

The partners from Jordan will compile a list of enterprises, vocational training centers, authorities and organizations that are involved or interested in EV/HEV training, servicing, management and development. These will be the basic members of the Network.

Official invitations with registration form and document clarify network's purpose, responsibilities and obligations will be sent to the potential members of the Network.

Those that accept will be part of the Network that should operational in (July 2021) and function until the end of the project.

The network will be invited to a workshop in the beginning of the project (July 2021) to agree on the courses list and content. In addition, they will be invited to tester workshops during the second year of the project to evaluate the developed courses and their relevance, list their priorities and give recommendations for improvements.

In addition, policy-makers will be invited to join project activities.

Long-term agreements between universities and enterprises will be created for internships, hiring graduates, lecturing in university etc. to achieve the benefit for both parties.

Target groups	Teaching staff, technical staff, enterprises and policy makers.
Current status	
Full compliance	
Partially compliance	





#### Not compliance Not started yet

Despite the fact that due to the pandemic there was a delay in some tasks, at the time of issuing this report there was none progress in this activity from last external evaluation report. It has to be taken into account that the due date was 14 July 2021.

Thus, the comments of the first external report are still valid at the time of issuing this report.

There has been established a network with more than 60 partners as indicated in the project. A registration form, in English and Arabic, was developed and distributed among the contacted members to inform about the aims and benefits of the project.

Three workshops have been carried out with good results.

Despite the fact a collaboration agreement has been signed between UJ and VTC there is still some partners that have to start with this task.

On the other hand, there is one EU partner that still has not achieved the minimum number of the stakeholders to be contacted.

No information has been provided about the involvement of policy-makers.

#### **Conclusions and recommendations**

The progress of the WP1 is nearly as expected. It has to be taken into account that there was some delay in the performance of some tasks and the way in which there have been carried out due to the pandemic. Although the pandemic affected 2021, in 2022 no progress has been made on the pending tasks to fully comply with expectations.

It would be desirable for the progress report to be more specific in the tasks that have to be developed according the expected outcomes of the project. The first three progress reports uploaded to the project's Google drive are the same. In the fourth one there are still many pending activities. It does not show much evolution in the last year.

Given the issuance date of this external evaluation report and the due date for this work package, it may be difficult to fulfill with the pending tasks.

#### WP2. Baseline Study

#### Aims and objectives

This WP aims prepare and publish a guiding report that summarizes the list of needed competencies needed in the market in the field of EV/HEV in Jordan, the potential lean technologies in the field of transportation and their regulations. The report will be prepared based on previous studies and a questionnaire to be prepared by the WP leader.

A workshop with enterprises will be conducted on (July, 2021) to review the reports and agree on the final list of courses for the professional diploma.





### 2.1 Summary of the key competencies needed by employers in Jordan in the field of EV/HEV

Type	Report
Due date	14/05/2021

#### **Description:**

A guiding report that summarizes the list of needed competencies needed in the market in the field of EV/HEV in Jordan, the potential clean technologies in the field of transportation and their regulations. The report will be prepared with close collaboration with concerned institutions (Energy ministries, Research centers and enterprises).

The report will be prepared based on previous studies and a questionnaire to be prepared by the WP leader. The report will raise the awareness regarding employability issues.

Target groups	Trainees, administrative staff, enterprises and policy makers

#### **Current status**

#### **Full compliance**

Partially compliance Not compliance Not started yet

A survey was design by the WP leader and co-leaders and discussed in the kick off management meetings. With the information gathered a report summarizing the list of needed competencies in the market in the field of EV/HEV in Jordan, the potential clean technologies in the field of transportation and their regulationswere issued and presented in a face-to-face meeting. No information about who was in the meeting has been provided so, it has not been possible to check if the institutions concerned were involved.

#### **Conclusions and recommendations**

The expected outcomes have been achieved and the schedule has been met. It would be desirable for future progress reports to provide access to all deliverables.

2.2 Workshop with enterprises and vocational training centers	
Type	Report
Due date	14/07/2021
Description:	

A workshop with enterprises in Jordan will be conducted to review the reports and agree on the final list of 8 courses.

Target groups	Trainees, administrative staff, enterprises and policy makers

#### **Current status**

#### **Full compliance**

Partially compliance





#### Not compliance Not started yet

The results of the report were presented in a face-to-face meeting in Mu'tah University with the attendance of Erasmus + office. The results and methodology were approved.

There has been produced a paper about the results of the analysis about the market needs in a recognized journal, including results from the sustainability work package and it is expected to produced a second paper in 2023.

#### **Conclusions and recommendations**

The expected outcomes have been achieved and the schedule has been met. It would be desirable for future progress reports to provide access to all deliverables and have more accurate information about the outcomes achieved.

Although the progress report says that this event took place, there is no information on who attended the meeting and no evidence on the final list of 8 courses.

It 's worth noting the extra activities planned, such as the two publications about the results, which were not expected as project deliverables.

#### WP3. Capacity Building

#### Aims and objectives

WP3 aims to build the capacities of professors who will teach the diploma in partner universities on different topics of EV/HEV, modern teaching methodologies, and how to actively collaborate with enterprises. Also a group of students will have the opportunity to attend a two-week workshop in one of the participating European Countries. The students will be selected during the piloting phase of the diploma and courses integration in existing programs. Selection will be based on prepared selection criteria.

The capacity plan will be prepared in the beginning of the project. Workshops for professors will be conducted within the first and second year before piloting the diploma.

**Five** training workshops will be conducted by European partners (TH-OWL, RWTHAachen, UD, BME, NTUA). At least, **two staff members** from each partner university will participate in these workshops. The target is to train at least **85** academic and technical staff (Laboratory engineers).

A **two-week training** workshop will be conducted for students in partner European universities. At least, **three students from each partner** university will participate in these workshops. The target is to train at least **24 students** in Europe.





3.1Workshop with enterprises and vocational training centers		
Туре	Report	
Due date	14/07/2021	

#### **Description:**

A long-term capacity building plan with selection criteria will be prepared. The plan aims to update and upgrade the skills and capacities of university professors, and technical staff, and students, in order to deliver the desired objectives.

The plan will include a programme for the proposed trainings in European partner's institutions, and a quality and impact assessment prepared in cooperation with the Quality committee.

Target groups	Teaching staff, technical staff and enterprises
Current status	

#### **Full compliance**

Partially compliance Not compliance Not started yet

The report for the capacity building plan has been written and submitted in 08/2021, a few dates after the deadline. No access to the plan has been provided. The quality and impact assessment have been drafted in cooperation with the Quality Committee and include some items that could demonstrate the success of the trainings.

#### **Conclusions and recommendations**

The expected outcomes have been achieved and the schedule has nearly been met. It would be desirable for future progress reports to provide access to all deliverables and have more accurate information about the outcomes achieved.

The activities carried out and included in the progress report, must not be a copy from the expected in the project but rather the activities carried out.

3.2 Developing Training Materials		
Туре	Training material	
Due date	14/08/2022	
Description:		

# The training material will be developed by EU partners. Special techniques and formats will be used in developing training material such as learning activities, exercises, examples and case studies. Training goal, learning objectives, learning methods/activities, documentation / evidence of learning will be specified for each training. Evaluation and assessment on quality of training will be conducted. A report

Teaching material will be prepared for staff and students' workshops.

documenting each workshop will be prepared by the hosting partners.





The training for faculty members will cover many issues regarding EV/HEV, based on priorities of Jordan.

**Target groups** Teaching staff, technical staff and students

#### **Current status**

Full compliance

Partially compliance

Not compliance Not started yet

As stated in the report provided about the tasks developed within the WP3, the subjects of each workshop were selected according to the expertise of each European University in the field of EV / HE vehicles. A survey was sent to the EU University and according to that the subjects were selected.

Within this activity, six 2-hours online workshops have been prepared and presented by the EU Universities according their expertise.

Furthermore 2-hours workshops have been prepared also by the Jordanian universities. Until the 1/08/2022, 4 workshops have been accomplished as it is said in the progress report.

The reports documenting the workshops are not in the evidence provided on the google drive where all the information about the project is stored. In the 4th progress report it is said that the due date of Activity 3.2 is going to be postponed to meet the end date of Activity 3.3 since the training material is finalized during each workshop.

The elaboration of the training material for the student workshop is pending; the progress report indicates that it is being prepared at the time of issuing this report.

#### **Conclusions and recommendations**

The second progress report is dated on the 10/02/2022, the third one on the 1/08/2022 and the fourth one on the 31/03/2023. According to it, training material for the conducted workshops has been prepared.

There should be a report documenting each workshop, but this information is not in Google Drive as mentioned above. However, according to the project planning it should have been carried out during the second year of the project.

The report documenting each workshop must be produced at the end of it as established in the project. Although in the progress report it is said that this activity has been postponed until the end of 3.3 activity the report of the workshops that have already been held can be prepared.

Training material for student's workshop should have been prepared during the second year of the project but at the time of issuing this report it is still not being prepared.

It would be desirable for future progress reports to provide access to all deliverables and have more accurate information about the outcomes achieved.

This recommendation was already done in the previous external evaluation report.





The activities carried out and included in the progress report, must not be a copy from the expected in the project but rather the activities carried out.

This recommendation was already done in the previous external evaluation report.

The deliverables provided for this activity do not meet expectations.

3.3Training Workshops in Europe for staff and students	
Type	Report
Due date	14/10/2023

#### **Description:**

The selected staff from all partner countries will visit European partners to learn from their experience on best practices in EV/HEV issues.

Six training workshops will be conducted by European partners (TH-OWL, RWTH Aachen, UD, BME, NTUA, and UNIVAQ). Two staff members from each partner university will participate in these workshops. According to project work plan they will be conducted in (M7, M10, M13, M16, M19, M21). The target is to train about 90 academic and technical staff (Laboratory engineers).

A two-week training workshop will be conducted for students in European universities during the last year (M30-M33). 24 students from Jordan will participate in these workshops. Each EU university will host 4 students to train them in their labs and conduct visits to enterprises and manufacturers. Participants will be selected based on the prepared selection criteria.

Target groups	Teaching staff, technical staff and students
Current status	

Full compliance

Partially compliance

Not compliance Not started yet

A program of the workshops for the academic and technical staff has been set up. 3 workshops have already been conducted (BME, RWTH and UD) as indicated in the 4<sup>th</sup> progress report.

One workshop has been held and conducted by BME in Budapest on 30<sup>th</sup> May-3<sup>rd</sup> June 2022. No information about the attendees has been provided.

On the other hand a workshop conducted by RWTH Aachen has been held from 7<sup>th</sup> - 11<sup>th</sup> November 2022.

There are not evidences about the third workshop conducted by UD.

In accordance with the capacity building plan (3.1), the dates of the workshops were rescheduled, so the workshops will be held on the following dates:

Dates Host University

January 2023 TH-OWL January 2023 UD May 2023 UNIVAQ





#### February 2023 NTUA

At the time of issuing this report no evidences about the expected workshops have been provided.

#### **Conclusions and recommendations**

It would be desirable for future progress reports to provide access to all deliverables and have more accurate information about the outcomes achieved.

Among the evidence provided there is only information on two workshops, the one carried out by RWTHAachen and by BME. The evidence provided for each workshop is different and does not prove the involvement of two staff members from the partner university or the number of participants in the case of the BME workshop.

The project must provide deliverables on all workshops carried out as indicated in the project.

The deliverables must coincide with those indicated in the project.

#### WP4. Establishment of EV/HEV labs

#### Aims and objectives

The aim of this work package is to establish 8 EV/HEV labs at each partner university to support the diploma teaching for students. The aim of this work package is to set up the needed scientific labs and smart classrooms to be used by the students during their study.

The established laboratories will bring on the following activities:

- 1) Assisting teaching of ECO-CAR diploma Students:
- 2) Research, in collaboration with the other faculties and/or industry;
- 3) Vocational training for external experts
- 4) External services: advices for industries and final users

The acquired equipment will be utilized within the project to achieve project objectives. A server will be acquired by the University of Jordan to host the project website and virtual learning platform. Smart classrooms equipped with Smart Board will be established for students in partner universities.

The lab will give the students the opportunity to develop various diagnostic strategies involving measurements on an actual EV/HEV system with real voltages under the most stringent safety conditions.

A "Hybrid and Electric Vehicles" Training system will be acquired by each university; this training system provides a safe work environment and allows students and trainees to fully focus on the task at hand. Trainees can become familiar with all the key theoretical background by means of an interactive e-learning course. Each of the theoretical sections is accompanied by practical exercises and tests of knowledge, which also help to advance vital diagnostic skills. These skills are further boosted by the built-in diagnostic system and the scrupulously selected fault scenarios. The system gives the students the opportunity to develop various diagnostic strategies involving measurements on an actual HV system with real HV voltages under the most stringent safety conditions. The system will include the following:





- CarTrain "Hybrid and Electric Vehicles" system
- Integrated WIFI measurement interface
- Experiment trolley
- Electric Service Gloves Class
- Insulation and Electrical Resistance Meter (Automotive)
- Personal Protective Equipment (PPE) for diagnostic work on high-voltage vehicles
- (helmet, insulating mat, Face protection screen)
- Two-pole voltage tester
- Charging Station for PEV and PHEV
- Diagnostic System include PC, software, display screen
- Emission measurement Equipment
- High precision automotive measurement units

The students will have the chance to be trained on real vehicles during their internships at enterprises.

4.1 Lab design and equipment list	
Type	
Due date	14/09/2021
- · · · ·	

#### **Description:**

The equipment list will be refined and detailed specification of the equipment will be prepared for the tender. The tendering process will be centralized to ensure best quality/price ratio. The processwill be initiated in the beginning of the first year, so that the labswill be ready to be used in (M21) by students.

The equipment will include EV/HEV training system, in addition to smart classroom equipped with smart board and data show.

Target groups	Teaching staff, technical staff and students
Current status	

#### Full compliance

Partially compliance Not compliance Not started yet

A plan for the period M1-M20 was prepared by WP Leader.

A list of Lab equipment and components for the Jordanian partners was prepared based on WP2.

A template for collecting data of the ECO-CAR centers/labs that will host the equipment in each university was sent by BAU. Also, BAU provided each partner by the equipment list they will receive.

In the evidences provided by the project, there is information about the 8 EV/HEV labs as expected.

From June 2021 until October 2021 the detailed specification of the equipment was tendered by UJ.





#### **Conclusions and recommendations**

Taking into account the evidences provided the WP 4.1 is fully compliance. The recommendation done in the first external evaluation report about having more accurate information of the outcomes achieved was taking into account.

The last progress report 15/03/2023, is more clear about what has been done and what is still pending.

At the time of issuing this report a final report is expected to be prepared.

4.2 Implementation of labs and prepare manuals		
Type	Event/Report/Service/Product	
Due date	14/09/2021	
Description		

#### **Description:**

The labs will be ready for training in (M21). Manual of experiments will be prepared for the labs.

The equipment will include EV/HEV training system. In addition to smart classroom equipped with smart board and data show will be established to teach the diploma.

Target groups	Teaching staff, technical staff and students
Current status	

#### **Full compliance**

Partially compliance Not compliance Not started yet

8 labs are ready for training. The equipment training has been carried out as expected.

Final technical reports have been produced for each university as expected in the project.

#### **Conclusions and recommendations**

Although the expiration date, in the description of each WP, was 09/14/2021, no activities were carried out in the first year, but in 2022, as specified in the project work plan.

The WP has been carried out as expected. Evidences were provided in a clear and strucutured way.

The latest progress report, 15/03/2023, is clearer about what has been done and what remains pending.

At the time of issuing this report a final report is expected to be prepared.





#### WP5. Developing ECO-CAR Professional Diploma

#### Aims and objectives

WP5 aims to develop and pilot ECO-CAR Professional Diploma in each partner university in Jordan; the activities will start by developing the study plan with courses descriptions to be submitted for accreditation purposes. The accreditation will be done according to the national accreditation system and the specific instruction in each university. The diploma will consist of 8 courses in (24 Credit Hours= 40 ECTS) that will be implemented in each participating university. The courses will be developed by establishing committees consisting from representatives from European universities, partner universities, and Enterprises. During the period of preparing the study plan, the workshop with enterprises in WP2 will be conducted with enterprises to get their feedback on the study plan and courses list.

A virtual learning platform will be established on the project website. The courses will be prepared as e-courses, and uploaded on a virtual learning platform created specifically for the project purposes, so the partners will have a full access to its content. The courses will consist of different modules.

A tuning workshop will be conducted within this WP for professors to agree on the teaching methods, assessment procedures and delivery methods so that a consistent quality is achieved among partners.

The next activity within this WP will be the courses piloting which will start by (M21). Different courses will be piloted in the Partner Country Universities, an Assessment Report will be written on the results of the delivery of the courses, a list of participants, description of the admission criteria, learning outcomes, assessment and quality assurance. After passing the diploma exam, a certificate will be given to the student. European professors will travel to Jordan for one week to teach some lectures for the students during the diploma implementation. The milestones will be the participants' list, official documents, assessment and piloting of the courses. The indicators will be the enrolment of the students and the participation in the courses. Also, the integration of selected modules within existing programs will be achieved and impact will be evaluated.

The Virtual Learning Portal will be created by the project coordinator (UJ) that will be hosted on the Project website (milestone). The Portal will be in English with at least 100 users. Different roles will be allocated to different type of users (lecturers, students, visitors). The platform will allow anyone with a user name and password to have access to the material, so this platform could also be used for distance learning. In addition, new pedagogical tools will be used to be more interactive that will include many pictures, videos and interactive activities. This will be done in order to attract the students' attention and also make the learning experience pleasant and different than the typical teaching experiences. The Virtual Learning Portal will also be the main repository of the learning materials.

5.1Develop Diploma Study Plan and course description	
Type	Report
Due date	14/07/2021
Description:	

The detailed study plan with courses descriptions will be prepared early for accreditation purposes. The accreditation application will be done during the first





year to avoid the delays and risks. The accreditation will be done internally within the university system or externally depending on the specific instructions in each university. The diploma will consist of 8 courses in (24 CreditHours= 40 ECTS) that will be implemented in each participating university.

Target groups No information given

**Current status** 

#### Full compliance

Partially compliance Not compliance Not started yet

The activities carried out had been, a courses selection based on WP2 report results; clustering; preparing a study plan template with learning outcomes and preparing a course outline template include ECTS component and learning outcomes. There has also been draft a course evaluation form.

#### **Conclusions and recommendations**

All expected activities have been done. A Diploma study plan has been designed and a course description. There are evidences of all the outputs generated.

5.2 Create Virtual Learning Portal	
Type	Teaching material/Report
Due date	14/10/2021
Decembrien	

#### **Description:**

A virtual learning platform will be established on the Project website. The courses will be prepared as online courses, and uploaded on a virtual learning platform that is created specifically for the project purposes, so the partners will have a full access to its content. The courses will consist of different modules.

The Virtual Learning Portal will be created by the Project coordinator (UJ) that will be hosted on the Project website. The Portal will be in English with at least 100 users. Different roles will be allocated to different type of users (lecturers, students, visitors). The platform will allow anyone with a user name and password to have access to the material, so this platform could also be used for distance learning. In addition, new pedagogical tools will be used to be more interactive that will include many pictures, videos and interactive activities. This will be done in order to attract the students' attention and also make the learning experience pleasant and different than the typical teaching experiences. The Virtual Learning Portal will also be the main repository of the learning materials.

 Target groups
 Teaching staff, technical staff and students

**Current status** 

#### Full compliance

Partially compliance Not compliance

Not started yet





The virtual learning portal has been created on the Project website as expected. Despite the virtual learning platform has been created some of the funcionalities that where planned are not in place. This is the case of the access with different roles.

During the last steering committee was suggested to organize a workshop about how to use the platform as not much information has been provided and not a lot of use is being done.

#### **Conclusions and recommendations**

Despite the virtual learning platform has been created some of the functionalities that where planned are not in place. On the other hand the virtual learning platform has been created in the second year of the project not in the first one as expected.

It would be convenient to provide more structured and accurate information on the progress report, there wasn't third progress report on the activities carried out in 2023, so there wasn't follow-up on the activities. In the fourth one, dated the 31/03/2023 the información is very confuse and inaccurate.

It would be desirable, to have a virtual learning platform with all the information and funcionalities expected in the project proposal.

Regarding the initiative of developing a workshop about how to use the virtual platform, although it is considered an initiative, it should be take into account that many activities of the project are still pending and there are only a few months left to finish.

5.3 Accreditation of the diploma/courses	
Туре	Event
Due date	14/01/2022

The accreditation application will be submitted during the first year to avoid any delays and risks. The accreditation will be done according to the national and institutional instructions and regulations in each university. The diploma will consist of 8 courses in (24 Credit Hours= 40 ECTS) that will be implemented in each participating university.

Also, some modules will be integrated in the existing courses of bachelor and master programmes in Mechanical, Mechatronics and Electrical Engineering.

Target groups	Teaching staff and students
Current status	

Full compliance

Partially compliance

Not compliance

Not started yet

The latest progress report, 31/03/2023, indicates it is already finish this activity.

In the information provided through Google drive to the external evaluator, there are evidences about the accreditation of three programmes as follows:





Vocational Diploma Accreditation of 6 out 8 universities. There is no evidence about JUST or ZUJ.

*Professional Diploma Accreditation* of 1 of 2 universities. There is no evidence about MU

Community college Accreditation of 1 University. There is no evidence about TTU

With the evidence provided there is not enough information to determine that activity 5.3 has been fully compliance.

#### **Conclusions and recommendations**

There are not evidences of the accreditation of the courses in all participating universities as expected. This activity was expected to be finished during the first year of the project, to avoid risks, accreditation be requested in accordance with national legislation in each case.

In the second year of the project, not all the accreditations have been obtained, according to the evidence provided. There is one year left to finish the project, so actions must be taken in this regard as soon as possible to avoid further delays in its execution.

It would be convenient to provide more information on the progress report, there is no progress report on the latest activities carried out, so there is no follow-up on the activities.

Finally, many of the evidences are in Arabic so it is quite difficult to determine the content of the information in order to analyze it.

5.4 Develop diploma courses content	
Туре	Teaching material/learning material
Due date	14/09/2022

The courses will be developed by establishing committees consisting of representatives from European universities, partner universities, and Enterprises.

The courses will be prepared as online courses (i.e. power point videos, quizzes) and uploaded on a virtual learning platform created specifically for the project purposes, so the partners will have a full access to its content. The courses will consist of different modules. The electronic material of courses will be developed according to EU guidelines. A template for course outline that include ECTS component and learning outcomes will be prepared. The courses will contain the description of the course; rationale and philosophy, the pedagogical approach and methods, the learning outcomes including knowledge, skills and social competences, the course structure and course integration methodology, the learning materials for each course, the assessment methodology, the guidance for implementation, the integrated delivery method including ECTS, and how the courses will be incorporated by partner country institutions.

Target groups	Teaching staff and students
Current status	
Full compliance	





#### Partially compliance

Not compliance Not started yet

The progress report indicates that activities have been carried out regarding this activity.

Among the evidence provided, it has been possible to verify that the course material has been generated, is adecuate, and meets expectations.

Recorded material, manuals and a description of each of nearly all clusters have been generated with detailed information about the course.

It is still pending check the translation, the completion of cluster 9, and all recordings of FG3 courses.

#### **Conclusions and recommendations**

This activity was expected to finish in September 2022. At the time of issuing this report most of the planned activities have been done, but there is still pending some of them. It is needed to take actions to be able to finish all the activities before the end of the project.

It would be desirable to provide information in the progress report on both the activities already carried out and the achievements. With the information provided is quite difficult to understand the status of the activities carried out.

It is desiderable to provide more structured and accurate information on the progress report, there wasn't third progress report on the activities carried out in 2022, so there was no follow-up on the activities. In the fourth, dated 03/31/2023, the information is quite confusing, as in the second, so it is difficult to understand the status of the Project and therefore keep track.

5.5Tuning Workshop	
Туре	Event
Due date	14/04/2022

Professors from each university will meet to agree on the teaching methods, assessment procedures and delivery methods so that a consistent quality is achieved among partners. WP Leader and Capacity Building in the field of higher education — EAC/A02/2019 — Joint Projects Vocational Training Diploma on Electrical and Hybrid Vehicles / ECO-CAR representatives from European partners will attend the workshop. The workshop will be conducted in M15.

This will be further enhanced through a teaching tuning workshop that will be organized in Jordan where representatives from each of the partners will work together to agree on the teaching methods, assessment procedures and delivery methods so that a consistent quality is achieved among partners. This will allow partners to have common teaching methods, procedures, assessments and quality assurance. Finally, a plan for the best exploitation of the courses by other will also be





conducted.	
Target groups	Teaching staff

**Current status** 

Full compliance Partially compliance

#### Not compliance

Not started yet

The latest progress report indicates that so far no activities have been carried out and that it is planned to do so on the M15. No activities have been planned for this WP in year 1 of the project, and no information or evidence has been provided about the tuning workshop in the second year of project implementation or at the begining of the third.

During the Steering Committe held in DEUSTO in March 2023, the partners were discussing how to approach this workshop.

#### **Conclusions and recommendations**

Actions must be taken to fulfill the planned task or, if it has already been carried out, provide evidence in this regard.

It would be desirable to provide more and more precise information in the progress report on both the activities already carried out and those pending.

5.6 Piloting and implementation of ECO-CAR Professional Diploma	
Туре	Event/Teaching material/Learning material
Due date	M21-M34

The diploma piloting will start by (M21). Each university will accept students in the diploma and start teaching the courses. Different courses will be piloted in the Jordanian Universities, an Assessment Report will be written on the results of the delivery of the courses, a list of participants, description of the admission criteria, learning outcomes, assessment and quality assurance.

After passing the diploma exam, a certificate will be given to the student. European professors will travel to Jordan for one week to teach some lectures for the students during the diploma implementation.

The milestones will be the participants' list, official documents, assessment and piloting of the courses. The indicators will be the enrolment of the students and the participation in the courses.

Target groups Teaching staff, students, trainees, technical staff

#### **Current status**

Full compliance

Partially compliance

Not compliance

Not started yet

During 2022, according to the evidence provided, only the University of Jordan has carried out the implementation of the professional diploma with 29 assistants. Among





the evidence, no report on the course was found as planned.

On the other hand, there are some announcements about the program in other universities but no information about its development or the attendees, key indicators for the compliance review.

As this activity is planned until the end of the project, a detailed review of the evidence will be made in the next external report.

#### **Conclusions and recommendations**

The implementation of the activity has begun and different courses have been announced, however the task is not being developed at the pace established in the project. It has not been possible to verify how the only course carried out was developed since the report on it provided for in the project has not been provided.

It is recommended to establish a clear schedule where it is indicated when the different trainings will be carried out, what training will be carried out, where and the number of people who will attend. Likewise, prepare a report that provides information on the training and its quality.

It should be noted that all deliverables must be provided to better understand how the project works

It would be desirable to provide more and more precise information in the progress report on both the activities already carried out and those pending.

5.7 Integrating some new modules in existing programmes		
Туре	Event/Teaching material/Learning material	
Due date	M21-M34	

To ensure a greater impact for the gained knowledge from European Partners, many courses modules will be integrated within existing bachelor and master programs (i.e. Mechanical, Mechatronic, Electrical Engineering).

These tasks will be documented through reports indicating the Course selected for implementation, Course title at university, Number of Credit hours, school – program –department, Number of students registered, Start and end date of the semester, Percentage of ECO-CAR Module integrated in the course.

Target groups	Teaching staff, students, trainees, technical staff
Current status	

Full compliance

**Partially compliance** 

Not compliance

Not started yet

An Institutional commitment letter has been signed by 7 Jordan Universities to integrate some modules in existing programmes.

#### **Conclusions and recommendations**

It would be desirable to provide more and more precise information in the progress





report on both the activities already carried out and those pending.

#### WP6. Quality Plan

#### Aims and objectives

This work package aims to assure the optimal quality, structure, processes and results of the project.

Quality assurance (QA) is a powerful tool to improve the effectiveness of the project. Its key principle to let main actors in education such as staff and students are responsible for improving educational performance.

A Quality Assurance and Evaluation Plan will be elaborated by the Quality Committee, that will be established during the Kick-Off meeting. The plan will investigate the quality standards of the different partner universities and standardize them in a shared approach.

The detailed plan will be a reference to manage the project effectively and to assess the performance. Quality control for all work packages will be applied. Evaluation surveys will be developed within this work package to guarantee a high level of quality at the different universities.

The quality assurance plan uses an agile approach to quality assurance related to providing acceptance criteria and specifications for all project outputs. The key end user outputs for each work package in the project are assessed through the production of a quality checklist (i.e. Quality Criteria Checklists, Dissemination WP Checklist, Social Science Checklist, Training and meetings evaluation checklist, Lab Design checklist) of suitable acceptance criteria overseen and verified.

Impact Evaluation Reporting is a part of WP6 related to the impact evaluation of all trainingand teaching outputs. Impact Evaluation Surveys using Kirkpatrick's four-step model willbe implemented to gather evidence from participants of the project trainings and evaluateits effectiveness on their teaching practices.

External Evaluator (EE) will be responsible to provide constant and independent information about the development and implementation of project' activities. The EE has to provide updated and independent evaluations about the realization of tasks and the achievement of aims to the Project Coordinator and the steering committee members. This allows an optimization of the resources and redirection of the activities, which can be affected by problems or delays. External Evaluator will conduct constructive evaluation by working according to the terms of reference and 'rules of engagement' set by the project Quality Manager and the manager of the project. The External Evaluator will advise and train partner universities to use suitable tools of evaluation for the sustainability of the program quality. The expert will submit a periodic evaluation reports for the project.

Corrective actions must be considered if needed.





6.1Quality Assurance and Evaluation Plan	
Туре	Report
Due date	14/04/2021
1.110 11.201	

#### **Description:**

A Quality Assurance and Evaluation Plan that outlines the quality assurance processes, tools, measures, procedures, and methodologies will be designed and prepared by the Quality WP leader. The Quality Assurance Tools and surveys will be annexed to the plan.

The quality assurance plan will use an Agile approach to quality assurance related to providing acceptance criteria and specifications for all project outputs.

Quality committee will provide guidance, standards and procedures that will ensure that the project produces relevant, trustworthy, rigorous and useful outputs and outcomes for partners, beneficiaries and users.

Target groups	Teaching staff, students, trainees, technical staff, administrative staff
Current status	

#### **Full compliance**

Partially compliance Not compliance Not started yet

According to the progress report and the evidences provided, all activities have been carried out to fulfill with planned activities in this WP.

The *Quality Committee* has been elected and its role is to provide guidance, standards and procedures that ensure that the project produces relevant, trustworthy, rigorous and useful outputs and outcomes for partners, beneficiaries and end users.

The *Quality Assurance* and *Evaluation Plan* has been elaborated (Deliverable 6.1). This plan establishes the quality standards and serves as a reference to manage the project effectively and to assess its performance. It describes the processes, tools, measures, procedures and methodologies to ensure that the activities and the results of the project meet the required quaintly standards. This plan includes as annexes the necessary templates (Task 6.2) to monitor the quality of the project, both internally and externally.

The Quality Plan has been updated on 22 June 2022 (versión 3).

#### **Conclusions and recommendations**

All expected activities have been carried out.

It is worth noting the detailed information provided both in the progress report and in the evidences through the google drive.





6.2 Applying Quality Assurance Tools	
Type	Report
Due date	14/01/2024

#### **Description:**

Specific quality checklists of suitable acceptance criteria overseen and verified will be prepared. Examples of these checklists include Quality Criteria Checklists, Dissemination WP Checklist, Social Science Checklist, Training and meetings evaluation, and LabDesign checklist.

Target groups	Teaching staff, students, trainees, technical staff,
	administrative staff

#### **Current status**

#### Full compliance

Partially compliance Not compliance Not started yet

Specific quality checklists, templates and evaluation forms have been prepared and included as annexes of the Quality Assessment and Evaluation Plan (Deliverable 6.1).

A set of evaluation and monitoring tools has been designed and produced:

- Project evaluation questionnaire: M12, M18, M24.
- Meeting evaluation survey: 13<sup>th</sup> management meetings evaluation; TH-OWL Steering Committee Meeting - July 2022 WP7-Dissemination and Sustainability Work Event-.
- Deliverable template.
- Deliverable evaluation form.
- Event evaluation form.

#### **Conclusions and recommendations**

According to the progress report and the evidences provided, all activities planned for this period have been carried out.

It is worth noting the detailed information provided both in the progress report and in the evidences through the google drive.

6.3 Impact Evaluation Reporting	
Type	Report
Due date	14/10/2023
l —	

#### **Description:**

The impact evaluation questionnaires will be prepared for Staff and students to gather evidence about the effectiveness of project activities (Training workshops, courses, services, etc.).

Kirkpatrick's four-level model of evaluation will be used for the evaluation of training





#### and courses.

The analysis plan for these questionnaires involves identifying descriptive statistics of individuals who have taken part with project activities.

A learning analytics tool to measure and assess the courses learning outcome will be adopted within the e-learning platform, to easily organize assessment efforts and generate meaningful data quickly.

Target groups	Teaching staff, students, trainees, technical staff,
	administrative staff

#### **Current status**

#### **Full compliance**

Partially compliance Not compliance Not started yet

An *Impact evaluation questionnaire* has been prepared following the Kirkpatrick's four level model of evaluation to gather evidence about their effectiveness and the teaching practices applied. These questionnaires will be filled in by the staff and students attending to them.

There have been produced the following impact evaluation so far:

4th Management Meeting Evaluation - May 2021

5th Management Meeting Evaluation - July 2021

6th Management Meeting Evaluation - September 2021

7th Management Meeting Evaluation - October 2021

8th Management Meeting Evaluation - November 2021

SC Meeting and Workshop Evaluation - June 2021

**Discussion Session Evaluation** 

**Networking Workshop Evaluation** 

'Talk on Batteries' Workshop Evaluation - June 2021

'Introduction on Internal Combustion Engines in Hybrid Vehicles and Well to Wheel LCA Calculation' workshop Evaluation - September 2021

'Vehicle Dynamics Fundamentals' workshop Evaluation – November 2021

'Vibroacoustic Comfort in Road Vehicles' Workshop Evaluation - November 2021

Charge Transport in Batteries and Hydrogen Vehicles Workshop by TH-OWL – December 2021

EV Charging Systems & Charging Infrastructure Workshop – March 2022

Modern Technology in the Diagnosing and Maintenance of Electrified Vehicles - March 2022

ECTS Workshop by UD – March 2022

Estimating the Impact of Topography and Traffic on Vehicle's Energy Consumption Workshop - April 2022

Budapest Training - June 2022

TTU - Lithium Sulfur Batteries in Automobiles – July 2022

Piloting ECO-CAR Professional Diploma at UJ Online event – September 2022

ECO-CAR Launch Ceremony and Tester Workshop at UJ – October 2022

Battery storage and its applications in EV and ESS – October 2022

BAU staff training (BME) – October 2022

HTU staff training (BME) – October 2022





TTU staff training (BME) – November 2022

Post training evaluation

Training in Germany – November 2022

There has also been design, at the beginning of the third year, a pre-course evaluation that it was not expected in the project but has been requested by the partners.

#### **Conclusions and recommendations**

According to the progress report and the evidences provided, all activities planned for this period have been carried out.

Taking into account the number of activities that still pending, it is necessary to thoroughly assess any new action that it is wanted to implement, analyzing the value that it can bring to the project. This is the case of the pre-course evaluation asked by the partner universities.

It is worth noting the detailed information provided both in the progress report and in the evidences through the Google drive.

6.4 External Evaluation	
Туре	Report
Due date	M6-M37
D	

#### **Description:**

The external evaluator role is to assess the project in its progress toward agreed objectives and indicators and to contribute at an intermediate and final stage of the project, which will support the EU standard for the project implementation.

Terms of reference for External Evaluation will be prepared by WP6 leader. Technical and financial offers will be gathered from different potential evaluators. Selection criteria and needed qualifications will be identified to select the most suitable evaluator.

Quality committee will study the provided offers and appoint the evaluator. External evaluator will be appointed during the end of the first year of the project.

Target groups	Teaching staff, students, trainees, technical staff, administrative staff
0	

#### **Current status**

#### **Full compliance**

Partially compliance Not compliance Not started yet

The terms of reference for external evaluation were drafted and published. The





document defined the selection criteria, needed qualifications, evaluation process, etc. that will enable the selection of the most suitable candidate. The external expert has been appointed.

#### **Conclusions and recommendations**

Although the external evaluator is already appointed, it was not at the end of the first year but in at the beginning of the second one. The administrative procedures of the project should be more agile.

It is worth noting the detailed information provided both in the progress report and in the evidences through the google drive.

#### WP7. Quality Plan

#### Aims and objectives

The aim of this work package is to effectively disseminate information of the activities of the project and to communicate its outcomes to multiple audience including the media and the public. A variety of dissemination activities will be conducted that include webpage, social networks, courses video presentation, electronic and printed material, dissemination seminars (2 in each partner university), participation in events to promote the diploma.

An effective dissemination and communication strategy will be developed. The dissemination and communication strategy will define a consistent approach to key target groups and will be based on a target group analysis with support of key stakeholders, including also language adaptation and content translation by the local partners.

Tester course workshops with enterprises will be conducted to test the modules and provide feedback in order to further improve their utility and usefulness. The participation in these activities will be the indicators of their success.

Sustainability can be envisaged as being composed of various elements. They comprise visibility, networking, policy consensus, users' feedback, funding (public or external), official recognition, competent staff, human resources commitment, achieved sustainability of related output.

The project website will be established and designed by the project coordinator (UJ) andWP7 leader. To reach the public effectively; project accounts on social media will be created. These social accounts will continuously be updated with information about the project and other relevant information to promote equity and inclusion in universities and society.

The dissemination material and communication activities (i.e. Project logo, Brochures, Folders, Rollups, e-newsletter, and Flyers) will be designed and prepared by the WP 7 leader in cooperation with other partners. Dissemination activities (i.e. Publication in scientific Journals, and documentary film) will be considered in the plan.

Seminars, info days, workshops for staff and students will be conducted in each partner universities.





The final conference will be conducted at the end of the project. The objective will be to disseminate the project outcomes and recommendations to university staff, students and society.

7.1Dissemination and sustainability plan	
Type	Report
Due date	14/04/2021
<b>.</b>	·

#### **Description:**

An effective dissemination, communication and sustainability plan will be developed by the WP leader to promote the developed diploma and its sustainability. The dissemination and communication strategy will define a consistent approach to key target groups and will be based on a target group analysis with support of key stakeholders, including also language adaptation and content translation by the local partners. The guideline for organizing and implementing the dissemination activities will be defined. All project documents must indicate that the project has received European Union funding, and carry the Erasmus+ logo and mention: "Co-funded by the Erasmus+ Programme of the European Union".

Target groups	Teaching staff, students, trainees, technical staff, administrative staff, enterprises and vocational training
	centres
	Centres

#### **Current status**

#### **Full compliance**

Partially compliance Not compliance Not started vet

Several Dissemination/Sustainability Plans were drafted. The final version (V04) was released on 26.01.2022. Will be officially adopted in Athens 09.03.2022.

Electronic copies were sent to partners.

#### **Conclusions and recommendations**

Although the indicators of this WP have meet met, the deadlines not. There has been a delay according to the planned.

It has to be noting that the recommendation in the first external evaluation report has been followed and evidences have been provided through Google drive.

7.2Project Website and Social Networks	
Type	Service/product
Due date	14/04/2021
Description:	

The project website will be established and designed by the project coordinator and





WP7 leader in the first three months of the project. Project account on social networks will be created as well.

The website will be in English, and has three main services: a) the main portal for dissemination where its material will be posted on, to increase awareness in regard to the project and its topic; b) the main portal for accessing the Educational Platform where all course materials will be stored; c) the exploitation of results and nensuring its continuation.

Target groups	Teaching staff, students, trainees, technical staff,
raiget groups	administrative staff, enterprises and vocational training centres

#### **Current status**

#### **Full compliance**

Partially compliance Not compliance Not started yet

Website and Social Networks (Facebook; Linkedin; YouTube) were developed and maintained by JU.

Despite the fact the activity has been already accomplished this activity is still being improves as the course material should be upload to the website.

#### **Conclusions and recommendations**

The website is accessible, friendly and intuitive and contains all the sections described in the project.

Like any web page, it requires uploading content regularly to keep the information updated and this is being done.

The activities planned have been achieved. It is still pending to upload some contents in the website such as the e-learning courses information.

On the other hand, having social media is a strong point but it is needed to get users, otherwise the social networks do not meet the dissemination purposes. During the Steering Committee meeting some actions were planned in order to cope with this.

Finally, information about the number of visitors to the website has not been provided.

It is important for the future to organize the information according to the project. In the Google drive there is information under WP7.2 that is related to 7.3 (i.e newsletter), and provide indicators in order to check if the objective has been achieved.





7.3Printed and Electronic dissemination material	
Type	Service/Product
Due date	Over Project life. Newsletter every 6 months
Description:	

The dissemination material and communication activities (i.e. Project logo, Brochures, Folders, Rollups, promotional material e-newsletter every six months, press releases to newspapers, and Flyers) will be designed and prepared by the WP 7 leader in

cooperation with other partners. The material will present thepurpose and accomplishments of the project.

Target	groups	Teaching staff, students, trainees, technical staff,
		administrative staff, enterprises and vocational training
		centres

#### **Current status**

#### **Full compliance**

Partially compliance Not compliance Not started yet

Several dissemination materials have been produced: Brochure, leaflet, folder, notebook, roll-up delivered and mouse pad.

The first newsletter was delivered on 30<sup>th</sup> November 2021, a few months later than planned. The second one was issued on the 1<sup>st</sup> January 2022, and the third one on the 15<sup>th</sup> July 2022. In the progress report it is said that on the 14<sup>th</sup> March the fourth newsletter was sent, but there is no evidences of it on the web or the Google Drive.

As regards the dissemination of the newsletter in the progress report is stated as flollows:

Newsletter #1 delivered on 28.11.2021

Newsletter #2 delivered on 24.03.2021 (it is understood that there is a mistake and the year is 2022)

Newsletter #3 delivered on 07.09.2022

Newsletter #4 drafted and sent on 14.03.2023

The newsletters meet the expectations in terms of information, but there is no information on the impact of this activity, since the communication and dissemination is not well planned in all cases.

#### **Conclusions and recommendations**

The activities of this WP have been carried out nearly accordingly to plan. Despite the fact that there has been a slight delay in the publication of the newsletter, it is considered that the plan is being fulfilled.

At the time of producing this report, the 4<sup>th</sup> newsletter was already drafted and sent to partners for suggestions.

On the other hand, it is not possible to draft the newsletter on the 31<sup>st</sup> of November and deliver on the 28<sup>th</sup> November.





On the other hand, it is recommended to disseminate the newsletter as soon as it is finished and not wait so long to publish on the website or send it to the partners, this is the case of the second newsletter.

It is important for future progress reports to organize the information according to the project. In the Google drive there is information under WP7.2 that is related to 7.3 (i.e newsletter). This recommendation was already done in the first external report but no actions were taking.

7.4 Seminars, Workshops, and info days	
Туре	Event/Report
Due date	Over Project life.
B 1 41	

#### Description:

Seminars, info days, workshops for staff and students will be conducted in each partner university. One workshop in each partner university with at least 30 participants will be conducted.

The goal of the workshops is to increase the awareness of the project and the employability issues.

Those activities will be conducted to disseminate the Project objectives in raising awareness on clean technologies for transportation, promote their usage, and to encourage the cooperation between universities and enterprises, and vocational training centres. At least one annual activity per partner university in Jordan. In addition; the project idea and outcomes will be presented in different events and conferences organized by other entities outside the consortium.

During these events, the printed dissemination material will be distributed to participants.

Target groups	Teaching staff, students, trainees, technical staff, administrative staff, enterprises and vocational training
	centres

#### Current status

#### **Full compliance**

Partially compliance Not compliance Not started yet

According to the progress report 11 online network workshops have been held during the two last years, seven Information Days were implemented and four Lab inauguration was delivered.

As per the proposal, one workshops in each partner university should be held with at least 30 participants. As stated in the progress report 5 of the 8 partners already delivered.

As regards the inauguration events that will be held at each Jordanian University, at





the time of issuing this report, four universities have done so.

#### Conclusions and recommendations

The activities of this WP have been carried out accordingly to plan. It has not been possible to check the number and profile of participants. This information must be given in the next progress report.

It is important for future progress reports to provide more clear information about the performance of the project and provide evidences in the Google drive. This recommendation was already done in the first external evaluation report.

7.5 Tester course workshops	
Туре	
Due date	14/07/2022

#### **Description:**

Tester workshops will be conducted in Jordan with the participation of enterprises (employers), this will be prior to the diploma implementation and during the preparation phase of teaching material. At least 25 members from the network will participate. The participants will be informed on the content, structure, assessment regime, entry requirements and job prospects. The participants will test the modules and provide feedback in order to further improve their utility and usefulness. The plan for the implementation of the diploma and integration of modules in existing programs will also be presented so that potential beneficiaries are aware of the existing support. Finally; the participants will also express their opinions on what modifications need to be done so these courses could be best exploited by other organizations.

	Target groups	Teaching staff, students, trainees, technical staff, administrative staff, enterprises and vocational training centres
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#### **Current status**

Full compliance
Partially compliance
Not compliance

Not started yet

According to project this activity should be carried out the second year of the project.

A launch ceremony and tester workshop was held at University of Jordan on 22.09.2022

#### **Conclusions and recommendations**

A tester workshop has been carried out but there is no information about the number of participants and no evidence has been provided.





7.6 Final Conference on Sustainable technologies in transportation	
Туре	Event
Due date	14/12/2023
Description:	

#### Description:

An International Final Conference that will present ECO-CAR diploma, project outcomes and achievements while also promote the, lifelong learning, knowledge of innovation in transportation, innovation in educational programmes, environment and climate change issues. Network members will be invited to the conference.

The conference will be conducted at the end of the project in Jordan and hosted by (UJ).

( • • )			
<b>Target groups</b> Teaching staff, students, trainees, technical staff,			
	administrative staff, enterprises and vocational training		
	centres		

#### **Current status**

Full compliance Partially compliance Not compliance Not started yet

According to project this activity should be carried out the 3rd year of the project.

#### Conclusions and recommendations

#### WP8. Management

#### Aims and objectives

The coordinator of the project (UJ) in cooperation with partners will be responsible to manage the project and coordinate between different partners. The project coordinator will be responsible for the financial and administrative management including the reparation of budget and reports, timeliness and accomplishment. To achieve the project aims, the coordinator will form the right committees with suitable members for different Work packages of the project, define the project milestones, establish Clear Communication, and Manage Project Risks.

The kick-off meeting will be held at The University of Jordan to establish common aims and purposes of the project. Along the project duration, another five management meetings will be conducted on periodic bases in different European partner universities.

Enterprises, public authorities, research centre, will be invited to the opening ceremony of the project.

Steering Committee, Quality Committee and Dissemination Committee, will conduct face to face and online meetings periodically, to create internal regulations, take decisions, distribute roles, monitor progress. The minutes of these meetings will be elaborated in occasion of all meetings and published on the web platform. They will





have a documental value keeping all decisions taken and will be elaborated by the project coordinator.

Management and Operational Structures will be formed during the kick-off meeting, and the responsibilities will be determined. Different leading committees will be formed including Steering Committee, Technical Committee, Quality Committee, Dissemination Committee, and Sustainability Committee. Partnership agreements will be elaborated during the first stages of the project.

Project Progress Reports will be produced every six months of the project, this will be prepared by WP leaders based on the received progress reports from each partner university. It will give a detailed overview of the activities and outcomes of the project to date and a clear account of the budget. Its production is led by UJ and is based on partners' reports. Intermediate reports and final reports will be delivered by the coordinator in cooperation with partners.

At the end of the project, according with Erasmus Plus guidelines, an External Auditor will be appointed for the analysis and certification of financial documents.

8.1Kick-off Meeting and other Consortium Meetings			
Type	Event		
Due date	<b>Mue date</b> M1, M7, M13, M19, M26, and M35		
Descriptions			

#### Description:

Not compliance

The kick-off meeting will be held during M1 at The University of Jordan to establish common aims and purposes of the project at the beginning of the project. Meetings will be parallel to workshops.

The second meeting will be during M7 with a training workshop in Europe, the third meeting will be during M13 with a training workshop in Europe, the fourth meeting will be during M19 with a training workshop in Europe, the fifth meeting will be during M26 in Europe, and the sixth meeting will be during M35 with the final conference in UJ.

The project's meeting is combined with the training workshops, to minimize the travel costs. As the contact persons will be participating in both activities.

Periodic online meetings will be conducted between the conducted as well to review objectives, and monitor the progress.

Steering Committee, Quality Committee and Dissemination meetings will create internal regulations establishing representation of partners, decision mechanisms, roles and products, as well as a main calendar for meetings. The minutes of these meetings will be elaborated in occasion of all meetings and published on the web platform. They will have a documental value keeping all decisions taken and will be elaborated by the coordinator.

Target groups	Teaching staff, technical staff, administrative staff.		
Current status			
Full compliance			
Partially compliance			





#### Not started yet

According to the progress report and the evidences, 13<sup>th</sup> management meetings, four Steering Committee meetings, two Quality Committee meetings and the kick off meeting and a local meeting have been held so far.

#### **Conclusions and recommendations**

The activities of this WP have been carried out accordingly to planned. The evidences demonstrate that info about meeting is available in the website of the project.

It is worth noting that the information provided in the progress report is well organized and complete and the evidences well organized.

8.2 Establishment of Management and Operational Structures and running the project	
Type	Service/product
Due date Overprojectlife	
Descriptions	

#### **Description:**

The project coordinator (PC) will be responsible for the overall planning and monitoring of the work of the consortium and will track deliverables and be responsible for the management and progress reports, cost statements and for the reports. PC will maintain the plan and produce reports against the plan, and provide revisions of the plan (if necessary) as agreed by the project's management committee. Management reports and cost statements will be made by the partners individually on the basis of EACEA templates. These reports will form the basis of the management, progress and cost reports made by the project manager to be sent to the EACEA regularly. The PC, in conjunction with work package leaders, will organize technical meetings where necessary to provide a forum for regular review of the work in progress in particular work packages. The project manager will maintain an online archive of project documents and information, continuously accessible for the partners.

The Management and Operational Structures will be formed during the kick-off meeting, and the responsibilities will be determined. Different leading committees will be formed including Steering Committee, Technical Committee, Quality Committee, Dissemination Committee, and Sustainability Committee. Partnership agreements will be elaborated during the first month of the project.

The committees will be responsible for:

- To provide high-quality management and coordination for
- the project consortium
- To ensure implementation of projects tasks as planned
- To ensure delivery of results as planned
- To oversee financial expenditure of project funds
- To resolve possible unexpected issues during the project

- To receive peccinic anexpected recase daring the project		
Target groups Teaching staff, technical staff, administrative staff.		
Current status		





Full compliance

Partially compliance

Not compliance Not started yet

According to the progress report and the evidences, none was done regarding this WP.

Looking forward on the agendas of the kick off meetings, it has been verified that the operational structure has been determined.

#### Conclusions and recommendations

Although the operational structured has been determined there is not enough evidences of the fulfillment of this activity. The 3<sup>rd</sup> and 4<sup>th</sup> progress reports do not give information as this regards.

The WP leader must ensure that all outputs of the WP are documented and to draft the progress report providing all information required. Also, it is recommended that the PC care of monitoring of all activities as well as to ensure that all information is provided by all partners on time.

8.3 Financial Management	
Type	Service/product
Due date	Overprojectlife
David to the control of the control	

#### **Description:**

Accounting and control of the budget will be realized by the project coordinator and the responsible person for the financial management at each partner university and is controlled by the coordinator of the project. For transparency provision of financial activity, accuracy of financial documentations is required.

## Target groups Current status

Full compliance
Partially compliance

Not compliance

Not started yet

According to the progress report and the evidences, none was done regarding this WP.

#### **Conclusions and recommendations**

The WP leader must ensure that all outputs of the WP are documented and to draft the progress report providing all information required, so as to the external evaluation report could provide feedback about the fulfillment of the activities.





8.4 Reporting (Progress, Intermediate and Final Reports)		
Type		
Due date	Every Six Months, Middle of the project, End of the Project	
Descriptions		

Description:

Project Progress Reports will be produced every six months of theproject, this will be prepared by WP leaders based on the receivedprogress reports from each partner university. It will give adetailed overview of the activities and outcomes of the project todate and a clear account of the budget. Its production is led by UJand is based on partners' reports. Intermediate reports and finalreports will be delivered by the coordinator in cooperation withpartners.

Target groups	Teaching staff, technical staff, administrative staff, trainees,
	students

#### **Current status**

Full compliance

Partially compliance

Not compliance Not started yet

There have been submitted two progress reports from each WP leader.

#### **Conclusions and recommendations**

The most of the progress reports do not provide useful and complete information.

The WP leaders must ensure that all outputs of the WP are documented and to draft the progress report providing all information required. There are many progress reports that do not provide nearly information about the activities, outputs or indicators. In some cases even the report was not produced. The PC must ensure that the progress reports are provided on time in order to monitor de project.

8.5 Hiring Financial Auditor	
Туре	Report/Serviceproduct
Due date	M33-M36
Description:	

During the last year of the project and according with ERASMUS Plus guidelines, an External Auditor will be appointed by the University of Jordan for the analysis and certification of all financial documents.

Target groups	Administrative staff
Current status	

Full compliance
Partially compliance
Not compliance
Not started yet

According to project this activity should be carried out the 3rd year of the project.

#### **Conclusions and recommendations**





#### 4. OVERALL CONCLUSION

The development of the project can be considered adequate. Although on some occasions there have been delays, in general the objectives set are being met.

The current status of the project is as follows:

	CURRENT STATUS			
WP1		WP6		
1.1	Partially complies	6.1	Accomplished	
	WP2	6.2	Accomplished	
2.1	Accomplished	6.3	Accomplished	
2.2	Accomplished	6.4	Accomplished	
WP3			WP7	
3.1	Accomplished	7.1	Accomplished	
3.2	Partially complies	7.2	Accomplished	
3.3	Partially complies	7.3	Accomplished	
WP4		7.4	Accomplished	
4.1	Accomplished	7.5	Partially complies	
4.2	Accomplished	7.6	Not started yet	
WP5		WP8		
5.1	Accomplished	8.1	Accomplished	
5.2	Accomplished	8.2	Partially complies	
5.3	Partially complies	8.3	Not accomplished	
5.4	Partially complies	8.4	Partially complies	
5.5	Not accomplished	8.5	Not started yet	
5.6	Partially complies			
5.7	Partially complies			

It is important to highlight **the need of monitoring the activities** carried out by the project leaders themselves. It is important to document and evidence the activities carried out so that it is possible to evaluate their impact and compliance.

It is also needed to **improve the communication** between the WP leaders and the stakeholders, and with the Coordinator of the Project.

Regarding the initiative of developing a workshop about how to use the virtual platform, although it is considered a good initiative, it should be take into account that many activities of the project are still pending and there are only a few months left to finish.

It is important to **respect the planned schedule** if you want to finish the project on time without having to request an extension.

Thanks to the attendance to the Steering Committee the external evaluator was able to understand the project since in many cases the **evidence and progress reports of some WP were missing**.