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International Master of Science on Cyber Physical Systems

WP4: Quality Control and Monitoring

D4.1 Working on quality assurance plan

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Version History

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Contributors

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Table of Contents

Version History	2
Contributors	2
Disclaimer	2
Table of Contents	3
1 Introduction.....	4
2 Quality monitoring and assurance process.....	6
2.1 The Monitoring Process.....	6
2.2 The Quality Assurance Committee.....	7
3 Quality monitoring activities and mechanisms	7

1 Introduction

1.1 Abstract

The main goal of the Quality control and Monitoring work package is to assure high quality of the project implementation that aims toward the improvement of education quality at partner's level, through establishment and implementation of some institutional procedures and mechanisms for evaluation, control, and quality assurance.

1.2 The purpose of this document

To achieve that, a Quality control and Monitoring plan is proposed that can be used as a reference for the quality control process, which will be continuously be updated and improved during the project lifespan, in order to ensure high quality project deliverables and outcomes.

1.3 Relation to other deliverables

As shown in Figure 1, the Quality assurance is connected to all the other WP4 deliverables, since as a first step, the plan is checked to make sure that the deliverables activities follow the high standard mentioned in the Quality assurance plane, this process is required by all partners involved in executing the activities of this WP.

Once the first version of the deliverables is ready, the Quality plan is checked again and the deliverables are sent to the Quality assurance committee (which will be described in the next section in more details) to make sure that the deliverables follow the high-quality standard mentioned in the Quality plan.

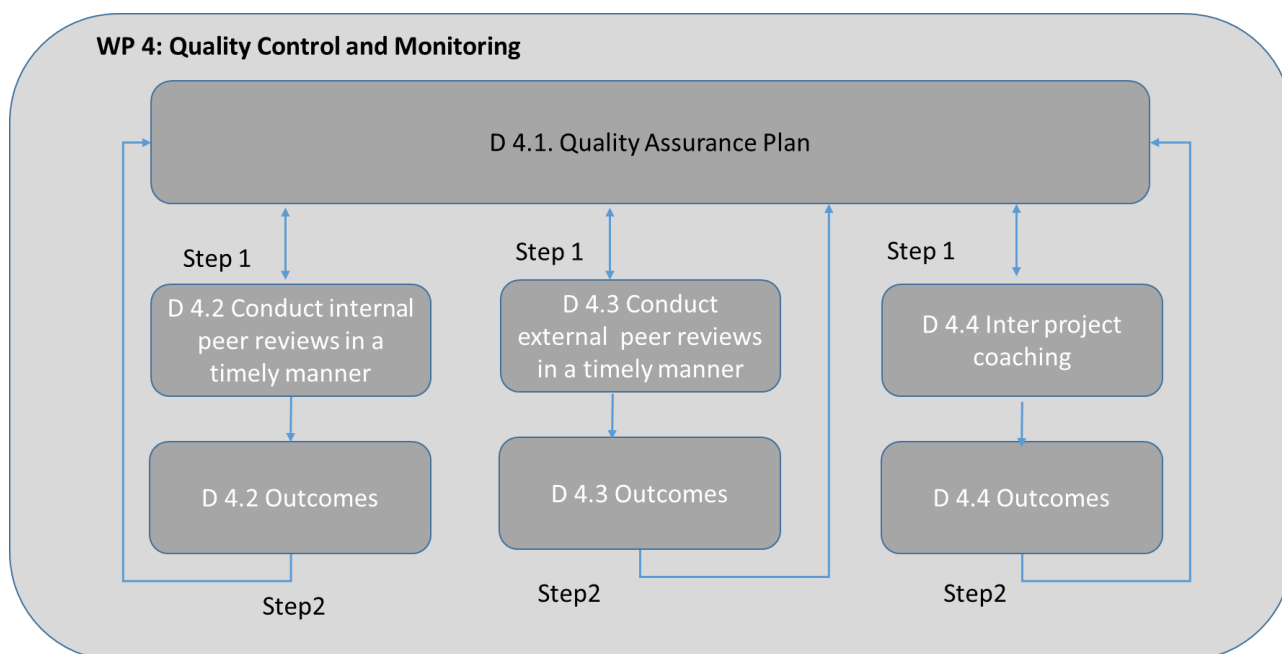


Figure 1 The relationship between the quality assurance plan (D4.1) with the other WP4 Deliverables

1.4 Relation to work packages

Figure 2 depicts the relationship between “WP4 Quality Control and Monitoring” and other work packages of the project. As depicted in the figure, the WPs are strongly connected with WP4, as once the WPs leaders prepared an initial report for the WP tasks, it will be checked for quality assurance by the Quality Assurance committee and according to a pre-determined timetable that is described in D4.2. Once the deliverables are checked by the quality assurance committee, the committee feedback will be sent to the WP leaders to enhance the deliverable and improve its quality.

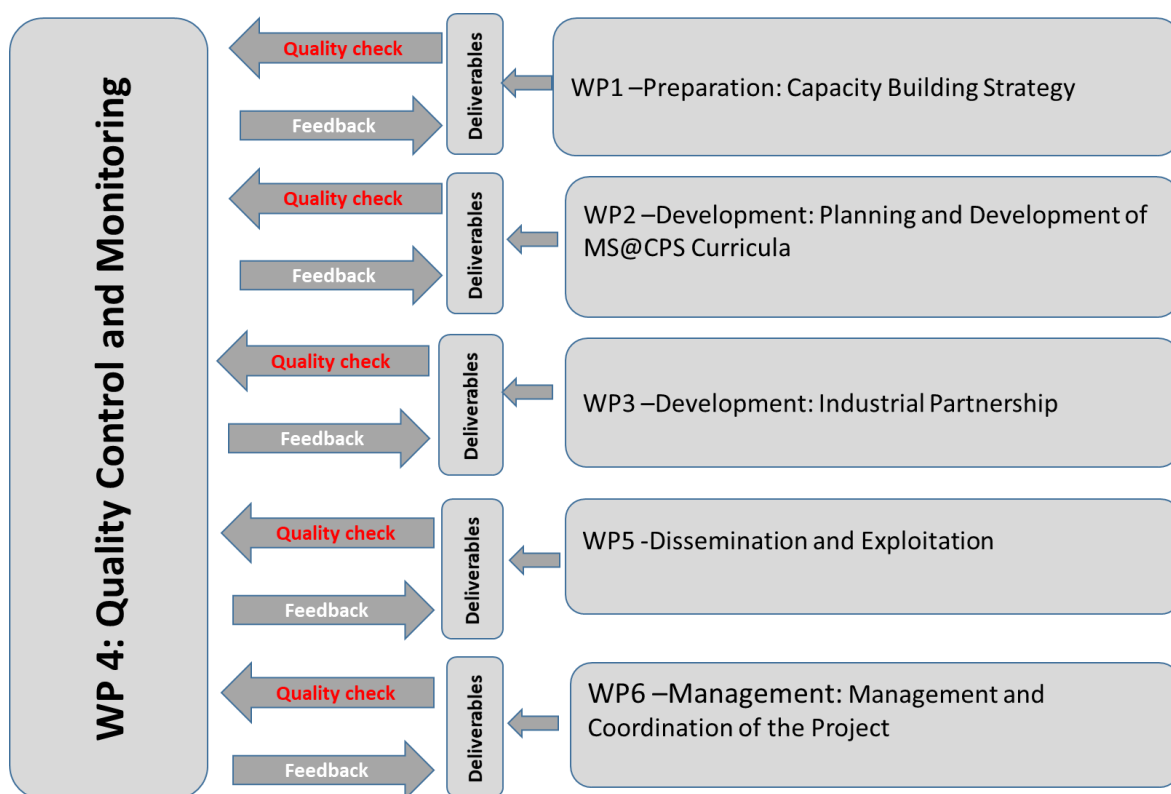


Figure 2: The relationship between the Quality Control and Monitoring WP and the work packages.

2 Quality Monitoring and Assurance Process

The aim of the quality monitoring and assurance process is to maintain high quality projects' deliverables. A quality monitoring and assurance process has been established. In what follows, a brief description about the monitoring process main components, and Quality Assurance Committee which is responsible for conducting the monitoring process.

2.1 The Monitoring Process

As shown in Figure 3. The monitoring process comprises two main actions: The internal and external quality monitoring.

In the internal monitoring process, the entire project related activities and deliverables are checked and monitored. This includes but not limited to the projects' meeting quality and organizations, the project deliverables, reports, following-ups on the monitoring visit reports and feedbacks. Further, the internal monitoring process ensures that the partner universities that will launch the study program follow the accreditation standard adopted by their university and country and is compatible with the European Credit Transfer System (ECTS).

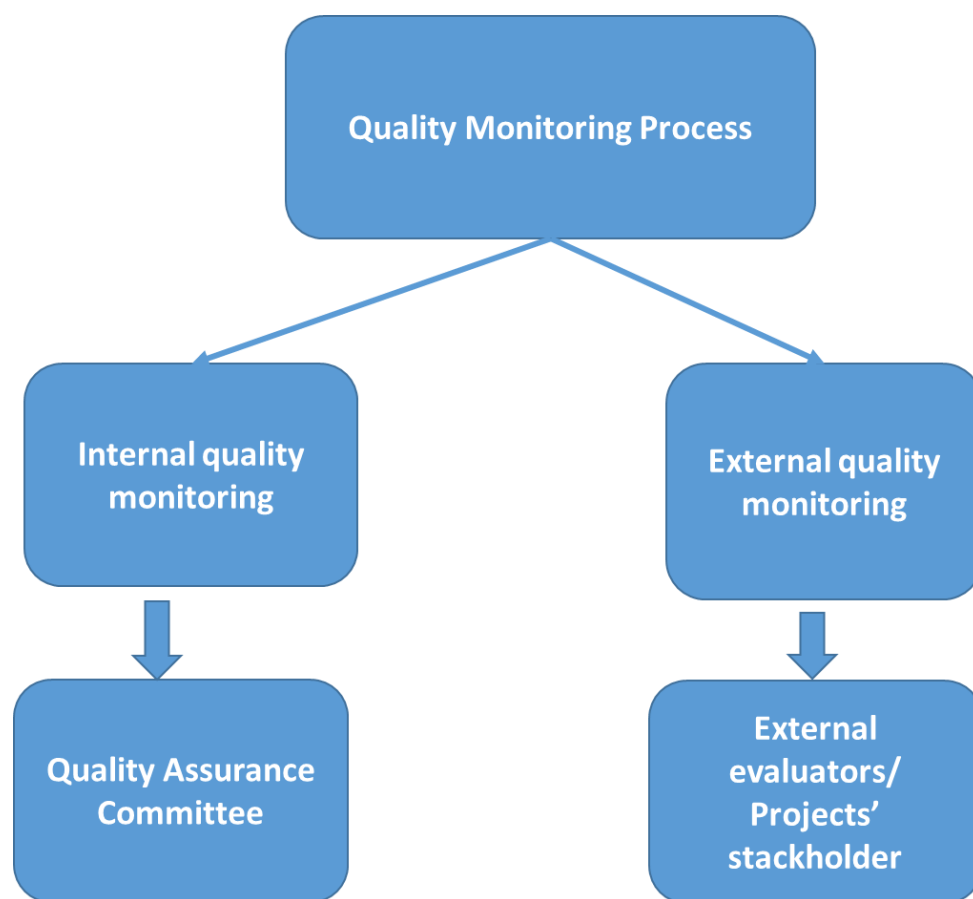


Figure 3 The monitoring process main compromises

Further, in order to have a more transparent evaluation, we will ask external reviewers from the industry and project stackholders to assess the quality of the project and give us feedback. This process will be a continuous process during the project development process, which will ensure that the external reviewers' feedback and opinion will be reflected to the program.

2.2 The Quality Assurance Committee

In order to organize the quality checking process between the partners and WP leaders, a Quality Assurance Committee (QAC) is established, which includes at least one member from each partner. Table 1 lists the QAC members.

Table 1 The Quality Assurance Committee members

No.	Name	Institute
1	Ala Khalifeh	GJU
2	Hamidreza Ahmadian	USI
3	Mohammad Saleh	KTH
4	Salaheldeen Odeh	AQU
5	Zaid Tawfeek Alhalhouli	TTU
6	Bassem BOUAZIZ	USF
7	Tarek Bchini	CU
8	Ezzaldeen Edwan	PTC

3 Quality Monitoring Activities

The proposed quality assurance plan will be tackling the following main activities:

1. Partners quality assurance

The project partners who are expected to launch the master degree program should ensure that the institution has the needed educational efficiency that guarantees high quality educational program.

2. Educational quality standards

The project partners who are expected to launch the master degree program should ensure compatibility with the:

- National standards: each country has its own quality standard as mentioned by the ministry of higher education. The developed program should fulfil the requirement of these standards.
- Bologna/ECT compliance assurance and credit hours mapping

3. Performance indicators

The quality of the launched program will be assessed based on the following two metrics:

- National and international (if possible) accreditation and recognition

- Students , faculty, and industry feedback and opinions
 - Surveys (about the developed study program)
 - Suggestions, recommendations
 - Establish an Advisory board from the industry to tailor the study programs and curricula such that it fulfils the industrial needs and requirements.
- 4. The evaluation of the deliverable outcomes will be analyzed through: Knowledge, competencies, values and attitudes obtained in the frame of MS@CPS program
- 5. Workshop/training outcomes: Different surveys will be conducted after training to check the influence of the new courses. Surveys will target teachers, students, retrained professors and university administration, and management from the enterprises.
- 6. Surveys to evaluate the quality of the consortium meeting will be conducted to ensure that all participants make the most of their time while attending these meetings.
- 7. Annual reports on results of project activity will be thoroughly analyzed, the project fulfilment quality will be evaluated.
- 8. To support the project actively a Public Council will be established, it will consist of representatives of the region universities, enterprises, businessmen and will support the most promising developments of the universities training courses at MS@CPS.
- 9. The project website site will make account of requests for enterprise and university development in order to evaluate interest of industry and business representatives in education process
- 10. Participants taking part in different activities, especially activities related to EU knowledge transfer, will be required to submit activity assessment reports describing the actually accomplished activities and relevant expected outcomes.
- 11. Visits of representatives of EU universities and Public Council in the final stage of each project year. The visits aim is analysis of concordance of results and actions planned assessment of results quality.