



WP4 QUALITY PLAN

QCM report no.2

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Task Leader:	Tom SAVU/ UPB
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REVISION SHEET

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DISTRIBUTION LIST

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1 Executive Summary

The purpose of this report is to provide an objective assessment from the project's point of view of the progress and achievements of the project during its duration, and, in particular, to identify any improvements and adjustments that should be considered for subsequent periods.

The evaluation period refers from May to September 2018 and include the partners representatives’ feedbacks accordingly to the project processes ongoing, the second QCMB meeting and the evaluations for the outcomes within the mentioned period.

2 Introduction

The purpose for internal quality monitoring and control is to validate that the project deliverables are completed with an acceptable level of quality and to assures that project’s processes are able to properly create these deliverables.

For this report, there were taken in account:

- QCMP, versions 0.6/ 15.03.2018; 0.7/ 10.09.2018; 1/11.09.2018 and 2/30.09.2018.
- PMCP, version 0.2/19.05; 0.3/ 21.07 and 1/ 09.08.2018
- reports submitted by the WP Leaders in the second meeting held in Guimaraes, Portugal in September 2018
- Evaluation criteria identification form completed for the tasks ongoing or that are starting in the appropriate future.
- project’s results.

3 Process-evaluation

The vacation period, both for students and also industry partners, made difficult the assesment of their needs, wich conducted to a further delay of the WP1 tasks. During the meeting held in Portugal the WP1 Leader presented a draft report with the collected data so far. The task 1.3 has been set to be delayed, in order to take in account also the feedback of the european students, for whom the beginning of the academic year is set for september or october, depending the partner.

As mentioned in the previous QCM report, there were developed a form in order to establish the evaluation criteria for the assesment of the process and outcomes of each task. The reponsible were informed by email on 2 April 2018. By september, it have become obvious that not all the member understood his function, only 26% were filled in. Therefore, during the QCMB meeting in Portugal, the QCMP held some important improvements, that included re-discussing the responsbile and their role (Table 1. Evaluation criteria identification responsible and Table 2. Internal Quality controls and monitoring team), detailing the QCM procedures (Table 3. Internal QC procedures). Also, the review an important tool was in order, a tool that will be used for internal control and monitoring: QF_QCM -Internal Quality Control and Monitoring - proposal that will be discussed further with the QCM team.

Table 1. Evaluation criteria identification responsible

WP	Task no.	Description	QCM responsible
1	1.1	Developing a gap analysis working plan	Wichai Chattinnawat/ Wasawat Nakkiew



	1.2	Analysing of MSIE curricula being offered, and of learning and teaching methods being applied	Teresa Monteiro
	1.3	Assessing needs of industry and students	Wichai Chattinnawat/ Wasawat Nakkiew
	1.4	Identifying gaps	Teresa Monteiro
	1.5	Identifying competitive factors for the curriculum	Wichai Chattinnawat/ Wasawat Nakkiew
	1.6	Developing recommendations for the specifications and areas of specialization for the curriculum	Wichai Chattinnawat/ Wasawat Nakkiew
2	2.1	Developing curriculum structure and academic program learning outcomes	Robert ULEWICZ
	2.2	Developing courses and course learning outcomes based on a matrix that maps course learning outcomes with program learning outcomes, and also teaching and learning methods,	Robert ULEWICZ
	2.3	Conducting pilot test of the key courses	Huynh Trung Luong
	2.4	Assessment of pilot test of the key courses and finalize the curriculum and the courses	Robert ULEWICZ
	2.5	Preparation for accreditation of the curriculum	Thitipong Jamrus/Komkrit Pitiruek
	2.6	Accreditation of the curriculum by the national accreditation institution in Thailand	Thitipong Jamrus/ Komkrit Pitiruek
3	3.1	Developing teaching materials	Teresa Monteiro
	3.2	Translating teaching materials between English and Thai	Anintaya Khamkanya
	3.3	Developing a web-portal for online learning	Huynh Trung Luong
	3.4	Training of staff on new tools and best practice exchange on modern teaching techniques	Teresa Monteiro
	3.5	Adapting learning materials developed to the online learning	Huynh Trung Luong
	3.6	Purchasing and installing of teaching equipment	Huynh Trung Luong
	3.7	Developing a laboratory and online remote access of the laboratory works	Huynh Trung Luong
4	4.1	Developing a quality control and monitoring system	Livia Veronica Lazar
	4.2	Implementing the internal quality control and monitoring of the project	Livia Veronica Lazar
	4.3	Inviting external evaluation of the project results	Supapan Chairapat
	4.4	Inviting external financial audit	Supapan Chairapat
5	5.1	Development of a Dissemination, Exploitation and Sustainable plan	Livia Veronica Lazar
	5.2	Creating a project website to support the dissemination strategy, and communication and collaboration among	Huynh Trung Luong
	5.3	Production and dissemination of project materials	Thitipong Jamrus/Komkrit Pitiruek
	5.4	Publications in professional journals, newspapers, magazines, brochures, and social media	Teresa Monteiro
	5.5	Developing joint short-term courses in the field of Industrial Engineering in cooperation with industry for professionals	Athakorn Kengpol

	5.6	Organizing dissemination events with relevant stakeholders	Wichai Chattinnawat/ Wasawat Nakkiew
	5.7	Organizing the final dissemination-sustainability conference	Huynh Trung Luong
6	6.1	Finalizing management structure	Tomasz NITKIEWICZ
	6.2	Organizing kick-off and regular consortium meetings	Apiwat Muttamara
	6.3	Monitoring and controlling the project	Thanate Ratanawilai
	6.4	Closing the project	Athakorn Kengpol

Table 2. Internal Quality controls and monitoring team (QCM team)

Partner	Role	Name
UPB	TL	Tom SAVU
AIT	CP	Huynh Trung Luong
CMU	CP	Wichai Chattinnawat
KMUTNB	CP	Athakorn Kengpol
TU	CP	Anintaya Khamkanya
KKU	CP	Sirorat Pattanapairoj
PSU	CP	Supapan Chairapat
UMinho	CP	Rui Sousa
CUT	CP	Anna WIŚNIEWSKA-SAŁEK

Table 3. Internal QC procedures

Task	Source	Responsible	Result	Destination	Due time
1. Establish the evaluation criteria for the starting task	Work Plan Detailed MSIE 4.0 Project (Logical Frame Matrix, WP deliverables)	Table 2. Evaluation criteria identification responsible, according to QCMP	QF-ECI, Evaluation criteria identification	QCMB	The 15 th day of the month, working day
2. Deliverable evaluation	WPL QF-ECI, Evaluation criteria identification Work Plan Detailed MSIE 4.0 Project (Logical Frame Matrix, WP deliverables)	QCMB Member	Deliverable Evaluation form With 3 options: -non applicable (for section B-content) (*) -improvement suggestions (**) -ok (* minimum 5 applicable (**) if the assessment is “No”, or below “satisfactory”, the QCMB member must make suggestions/ observations	WP4 Leader	Within 3 days
	QCMB Member	WP4 Leader	Deliverable Evaluation results centralized (the “Deliverable” is accepted only if all the assessment is Y or at least “satisfactory”	WPL with CC to PC	Within 2 days
3. Internal Quality Control and Monitoring	Work Plan Detailed MSIE 4.0 Project (Logical Frame Matrix, WP deliverables)	Table 3. Internal Quality controls and monitoring team, according to QCMP	QF-QCM-V3 Internal Quality Control and Monitoring	WPL 4 and co-WP4	The 15 th day of the month, working day -Oct.2018 -Dec.2018

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	QF-ECI, Evaluation criteria identification				-Febr.2019 - Apr.2019
	QF-QCM-V3 Internal Quality Control and Monitoring x 9	WP4 Leader and Co-Leader	Centralized report (the format it will be established by the end of October)	QCMB	-within 1 week
	Centralized report	QCMB	Suggestions/ observations	WP4 Leader	-within 2 days from receiving the centralized report
	Centralized report Suggestions/ observations	WP4 Leader	Centralized report- final	PC, with CC to QCMB	-the end of the reporting month

There is programmed an internal control and monitoring report by 15th October, but a readjusting of the project work plan is in order.

4 Product-evaluation

During May to September 2018, there were submitted for quality assessment:

- WP5 – Task 5.1, DESP(V6) - Dissemination, exploitation & sustainable plan, the evaluation result concluded "approve subject to correction" with 6 answers from 9. WP5 Leader had implemented the modifications required as DESP(V7)/ 9.10.2018.

5 Evaluation of the project impact

Between September and December 2018, MSIE 4.0 was introduced to different target groups for a proper dissemination of its results: Master's students and teaching staff of Engineering and Management of Technological Systems from UPB; the cluster meeting for Erasmus+ Capacity Building on Higher Education Projects involving Thai HEIs at Kasetsart University (KU); the 9th International Conference on Advanced Manufacturing Technologies (ICAMaT 2018), Bucharest, Romania; the 19th Asia Pacific Industrial Engineering and Management Systems (APIEMS 2018), Hong Kong.

A number of 5 papers were presented in different international conferences: “Identifying Key Criteria in Development of Industrial Engineering Education”; “Sustainable Development in Accordance with the Concept of Industry 4.0 on the Example of the Furniture Industry”; “The Quality of Education on Workplace Safety Master Studies -The Issue of Teaching Methods”; “The effect of lean tools on the safety level in manufacturing organisations”; “Knowledge Management –Education in the Light of Industry 4.0”; “Embedding Memorable Experience to Customer Journey”.

6 Conclusions

During the second QCMB meeting, there were identified the need to detailed the internal quality control and monitoring procedure and to establish officially through the QCMP the responsible involved. Each task is been monitored and evaluated accordingly with QF_ECI. There remains the need for a better scheduling of the activities, taking in account that WP1 delayed outcome affects the proper start for the next tasks.