



**SEM-SEM**



**Smart Control Systems for Energy Management**

Erasmus + #: 561703-EPP-1-2015-1-UK-EPPKA2-CBHE-JP

## **Quality Assurance Report**

### **5<sup>th</sup> Semester**

**(15<sup>th</sup> October 2017 – 14<sup>th</sup> April 2018)**



<b>Project Acronym:</b>	SEM-SEM
<b>Full Project Title:</b>	Smart Control Systems for Energy Management
<b>Project No.:</b>	561703-EPP-1-2015-1-UK-EPPKA2-CBHE-JP
<b>Funding Scheme:</b>	ERASMUS+
<b>Project Coordinator:</b>	STAFFORDSHIRE UNIVERSITY (SU)
<b>Project Quality Coordinator:</b>	Eurotraining

<b>Title of Work Package</b>	Monitoring and Quality Control
<b>Work Package</b>	WP12
<b>Work Package Leader</b>	EUROTraining
<b>Target Group</b>	<ul style="list-style-type: none"><li>✓ All project partners</li><li>✓ Students, teachers, engineers and industry management</li></ul>
<b>Starting Date</b>	15-10-2015
<b>Activity Duration</b>	3 years
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## 1. Introduction – Purpose of this Document

Monitoring and Quality Control is an integrated process to the implementation of every successful project, as it is necessary in order to ensure and improve the quality of its respective activities and results. In SEM SEM, the quality assurance is continuous, thus implemented throughout the project's lifetime.

In this framework, the Quality Assurance Report for the 5<sup>th</sup> Semester summarizes the results of the evaluation process that was implemented during these months of the project, based on the established Quality Assurance Plan. It includes evaluation results on the progress of project implementation as reported by all partners, as well as the evaluation of all activities implemented during this semester (4<sup>th</sup> Project Meeting in Cairo, Workshop in Cairo, Conference in Cairo, and seven trainings in Egypt, Jordan and Greece).

## 2. Monitoring Results of General Aspects of Project Implementation

In this section of the Quality and Monitoring Rubric, all partners, regardless if they led a WP or not, were asked to evaluate some general aspects of the implementation process so far. Questions referred to the following categories:

- Progress and Direction
- Management and Communication
- Team and Roles
- Lessons Learned
- Opportunities and Risks
- Difficulties and Challenges

The results of the internal evaluation of those aspects for the third semester of the project are analysed in the next chapters. *It should be highlighted that even though detailed Quality and Monitoring Rubrics have been gathered by all partners of the project, it was decided that this report's objective is to refer only to the most significant aspects of the evaluation that will ensure its substantiality*



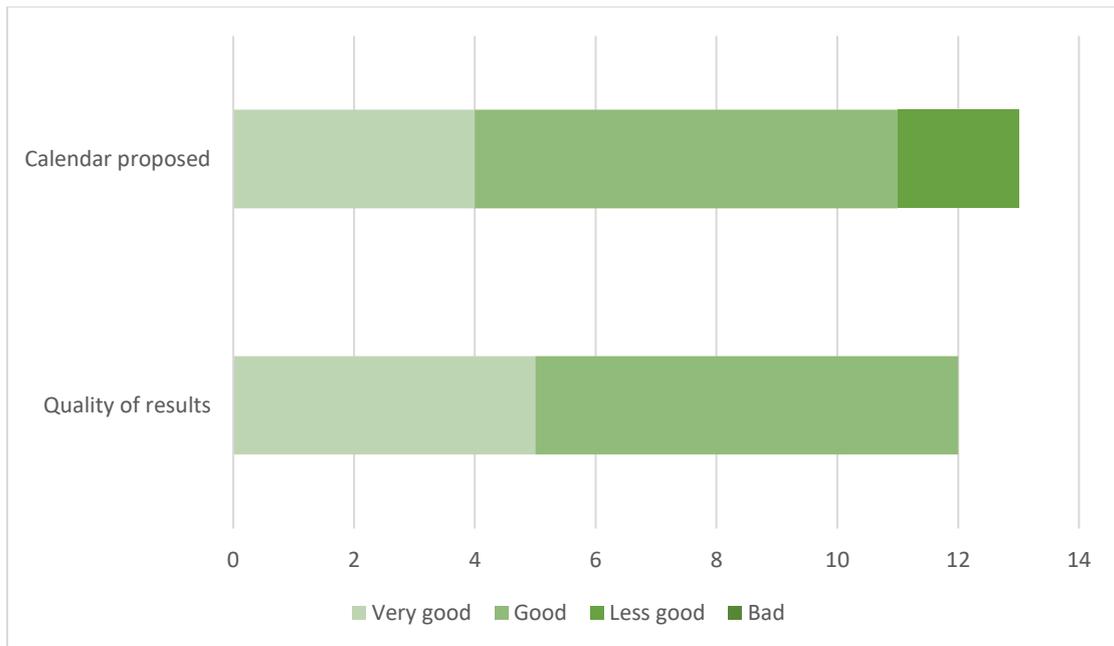
*and provide the appropriate feedback for improving the project's progress and results. All relevant evaluation documentation is available to Eurotraining, as leader of WP12: Monitoring and Quality Control.*

### 2.1 Progress and Direction

In that part of the evaluation process, partners expressed their opinions about the progress of the project implementation.

At first, partners were asked to identify any deviation in outcomes from the initial plans. For deviations in WP6, it was mentioned that they were mainly due to the *“need to adjust the schedules both at EU partners and EG and JO in order to facilitate the travelling arrangements, VISAs, etc.”*. For WP8 *“AASTMT took longer times as there are some differences in between the program structures rather than MU, however both used the same courses and contents”*. Regarding deviations in WP9 (earlier implementation), the lead partner commented that *“The team decided to start right in the first semester the preparatory work for the double degree, which took 18 months to be completed. The preparatory meeting was anticipated and occurred in May 2017 in Lisbon and the second meeting took place in February 2018m where a memorandum of understanding was signed that highlighted the basic procedures to establish the final agreement which is planned to be signed in the final meeting.”*

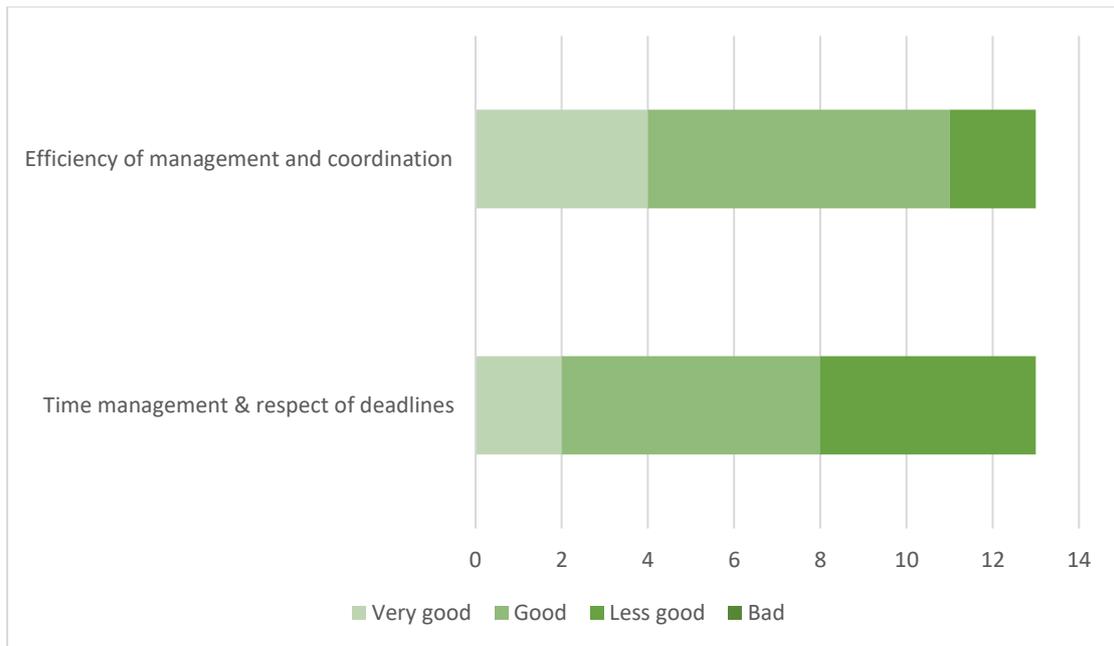
Some of the most significant aspects of evaluation were the proposed calendar for the implementation of the project's activities, as well as the overall quality of the project's results so far.



As results indicate, all partners were satisfied by the quality of results produced so far in the framework of the project. Regarding the calendar proposed for the implementation of its activities, partners were less satisfied, indicating that certain challenges were faced either in the formation or in the realization of the timeline.

## 2.2 Management and Communication

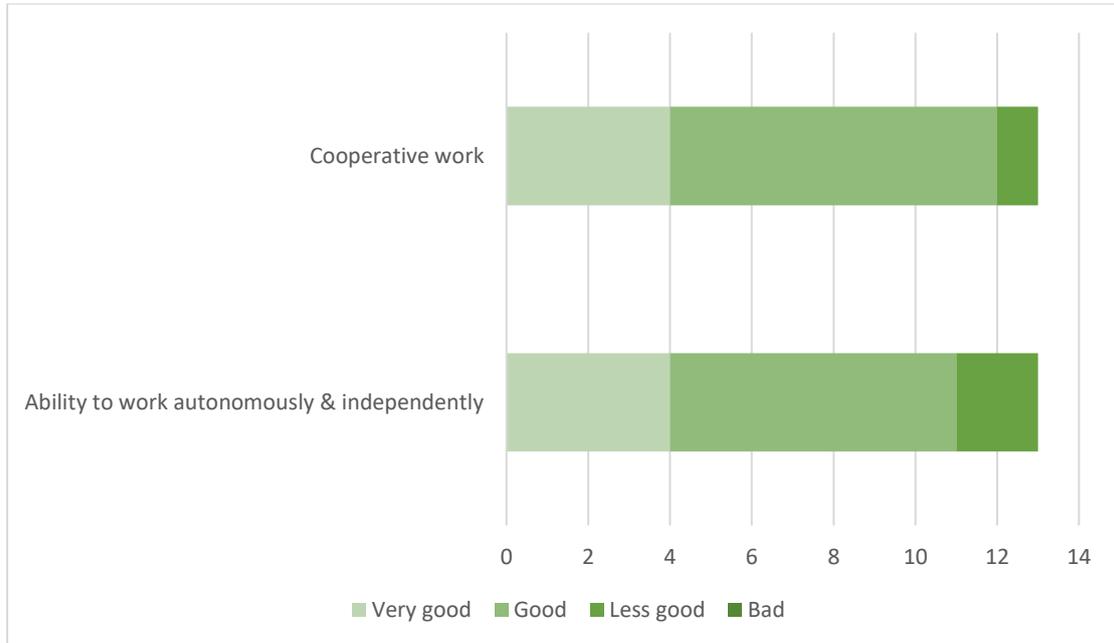
This part of the evaluation included aspects of the management and communication processes of the project. Particularly about the efficiency of the management and coordination arrangements and the time management and respect of the established deadlines, partners responded the following:



As the above graph indicates, some problems were detected by partners regarding the time management and the respect of deadlines agreed. Subsequently, delays were reported in the development of specific results, as confirmed in the WPs' monitoring of progress that will follow in the next part in this Report. Result on the efficiency of management and coordination were more encouraging.

### 2.3 Team and Roles

In this section of the evaluation, partners were asked to evaluate, among others, the cooperative work of partners and their ability to work autonomously and independently. Partners' responses, as depicted in the chart below, indicate that they were, in general, satisfied by both the cooperative work and their ability to work on their own, under coordination of the relevant partner. However, there were, also, some less favorable opinions expressed by partners, especially in respect to the ability to work autonomously and independently, highlighting the need to take further measures to ensure that partners understand their roles and responsibilities and are able to achieve the foreseen results.



Partners were, also, asked about what worked and what didn't work well in the Partnership:

What worked well	What didn't work well
<i>Good collaboration between partners in drafting MSc modules</i>	<i>Budget flow of the project</i>
<i>Exchange experience together</i>	<i>Money transfer and equipment</i>
<i>Most of it</i>	<i>Communication and organization</i>
<i>Team work</i>	<i>Financial Management and the delay in transferring the money</i>
<i>Development of the courses and training workshops</i>	<i>Some partners were not that willing to regularly communicate.</i>
<i>Development of the project in general</i>	<i>Some partners are suffering from delays Task 5.4 and 5.5, but they are working very hard to sort out these delays.</i>
<i>Some partners were willing to help in order to cover other partners' lack of commitment.</i>	<i>The good cooperation between the partners, the constant support and the flexibility to adjust procedures when necessary.</i>
<i>The progress in tasks 5.3, 5.4 and 5.5 are very good and aims has been achieved.</i>	<i>AASMTs willingness to take initiatives helped significantly in reducing the confusion among the partners.</i>
<i>The online coordination meeting when requested.</i>	



<i>The other partners are not interested in the project and are not willing to work.</i>	
<i>The roles and responsibilities were not very clear from the start</i>	
<i>Partners were able to get a better perspective during the on-site visit of Alexseeds and pinpoint industrial needs that can be met by the project</i>	

## 2.4 Lessons Learned

Regarding the translational approach of the project, as well as actions that could be taken in order to improve it, partners' opinions are summarized as follows:

<p><b>How successful has SEM-SEM been in demonstrating a trans-national approach?</b></p>	<ul style="list-style-type: none"> <li>- <i>Created awareness and a shared vision in addressing energy efficiency challenges for industry (end users) in Egypt and Jordan.</i></li> <li>- <i>Moderate as HU had some good EU projects before</i></li> <li>- <i>Very good</i></li> <li>- <i>Not bad</i></li> <li>- <i>Little</i></li> <li>- <i>Very successful</i></li> <li>- <i>The project managed to actively involve partners from four European countries, Egypt, and Jordan. Transnationality is at the core of the project's objectives and sustainability strategy is focused on that.</i></li> <li>- <i>The tasks of this work packages have been organized to be shared between European and non-European partners which allowed the exchange of different experiences.</i></li> <li>- <i>I believe it was very successful</i></li> <li>- <i>It was quite successful in terms of mobility of students etc.</i></li> <li>- <i>Very good as project covers different perspectives from different partners</i></li> </ul>
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<p><b>What actions could be taken to improve the trans-nationality of the project?</b></p>	<ul style="list-style-type: none"> <li>– <i>More dual degree</i></li> <li>– <i>Equipment purchasing</i></li> <li>– <i>Joint master program with EU partners</i></li> <li>– <i>Promotion of the project</i></li> <li>– <i>Universities can utilize their networks and further communicate the project and its results to other relevant higher institutions of Europe, Egypt, and Jordan.</i></li> <li>– <i>I believe having individual agreements between the project partners which can take in the consideration the individual requirements will be very useful.</i></li> <li>– <i>Follow-up funding to exchange students between partner universities.</i></li> <li>– <i>Students should get more opportunities to visit EU countries and learn. Academics did not seem to be interested the trainings.</i></li> </ul>
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### 2.5 Opportunities and Risks

Among others, partners were asked about the challenges they faced during this semester of the project, but also the opportunities and/or unexpected benefits they discovered thanks to their involvement to the project.

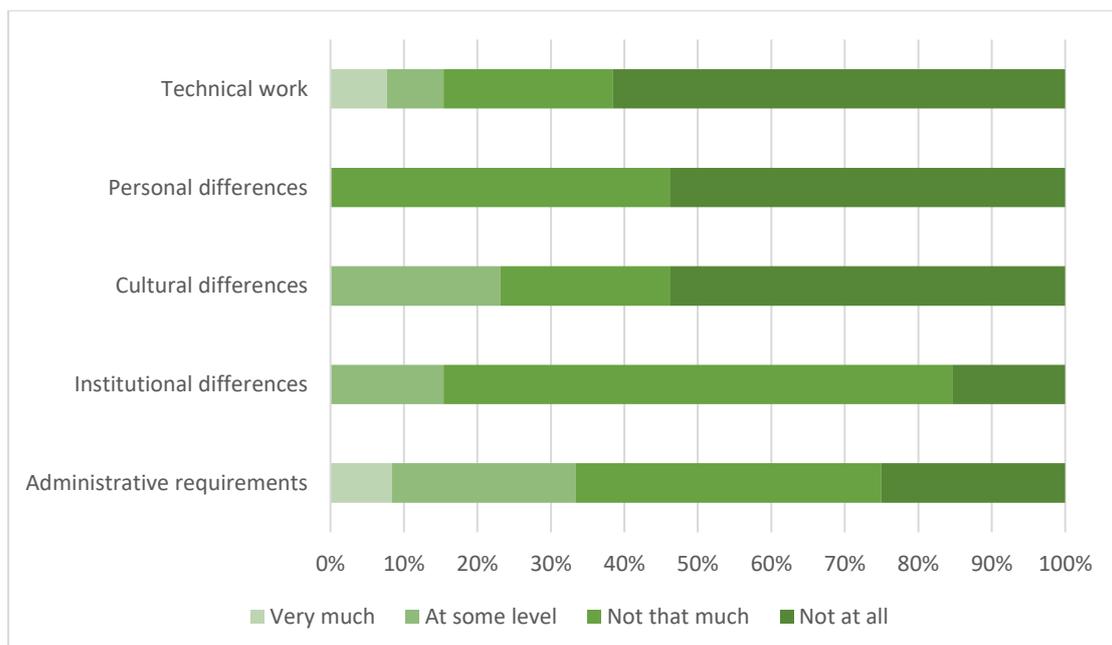
Challenges faced	Opportunities/unexpected benefits
<ul style="list-style-type: none"> <li>– <i>Accreditation</i></li> <li>– <i>Purchasing the equipment</i></li> <li>– <i>High standards of the project</i></li> <li>– <i>Communication was not always effective and sometimes this caused delays in producing results.</i></li> <li>– <i>Survey report on exact training needs for the Egyptian industry and the services provided by training centers offering training in clean energy and environment is available from WP.2.</i></li> </ul> <p><i>The main challenge is the different internal regulations of each institute/country and it was the main</i></p>	<ul style="list-style-type: none"> <li>– <i>Large market size for energy efficiency and consequent employability potential in both Egypt and Jordan</i></li> <li>– <i>Visiting new labs and explore new technology at EU partners</i></li> <li>– <i>Learning from training courses about energy management building</i></li> <li>– <i>Some interested topics in the project field in addition to the development of courses and train of trainers' workshops</i></li> <li>– <i>Intercultural cooperation, sharing of knowledge and experience with colleagues</i></li> </ul>



<p><i>reason for some delays. Specially the equipment fund cannot be split to match the received fund instalments.</i></p> <ul style="list-style-type: none"> <li>- <i>The requirements for the trainings were not very clear</i></li> <li>- <i>Communication</i></li> <li>- <i>Delivering the reports early to avoid the governmental complications and time delays.</i></li> </ul>	<ul style="list-style-type: none"> <li>- <i>New opportunities to cooperate with partners</i></li> <li>- <i>We interacted with the project partners and stakeholders in the European countries and I believe that there is a good opportunity to collaborate in different areas such as research, projects, learning and teaching activities.</i></li> <li>- <i>Several research opportunities for future projects were identified.</i></li> <li>- <i>The high teamwork in the project work.</i></li> <li>- <i>Partners were able to exhibit Alexseeds experience in designing the training courses with pinpointed topics</i></li> </ul>
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### 2.6 Difficulties and Challenges

In the last part of the evaluation, the roots of difficulties and challenges faced were identified by partners. As results indicate, partners' opinions on the roots of difficulties/challenges greatly varied. For example, most partners didn't find that the technical work needed was a worth mentioning cause of difficulties, while there were other partners who identified technical work as a main or significant cause. The same applied to other potential causes, such as the administrative requirements of the project.





Partners commented, among others, that *“The project has high administrative requirements, especially when no overhead costs are available”, “Perhaps the working style is different in terms of punctuality”, “There are some significant culture differences but again the open mindness of team members solved the problems and it was very rich the cultural exchange”, and that “There are a lot of institutional differences which creates some challenges but all the members were willing to overcome these differences”.*

### 3. Monitoring Results of Progress and WP Completion

According to the established quality assurance procedure, leaders of active WPs have to report on the progress of implementation. During the fifth semester, the following WPs were active:

- WP4: Tailoring of new professional training courses (Leader: Eurotraining)
- WP5: Development of manuals for training and labs (Leader: Staffordshire University)
- WP6: Training of EG and JOR teachers on the master courses (Leader: IST)
- WP7: Training of EG/JOR trainers on professional training program (Leader: UCY)
- WP8: Applying to Egyptian and Jordanian supreme council of universities for accreditation of the master programme (Leader: AASTMT)
- WP9: Administrative work of the Double Degree (Leader: IST)
- WP10: Dissemination of the project (Leader: AASTMT)
- WP11: Project sustainability (Leader: ALEXSEEDS)
- WP12: Monitoring and Quality Control (Leader: Eurotraining)
- WP13: Project Management (Leader: Staffordshire University)



### 3.1 Progress of WP4

Deliverable n.	Deliverable title	% Achieved	Delivery date (according to application)	Actual delivery date
4.1	The developed training materials	100	14/03/2018	14/04/2018
4.2	The new training material	100	14/03/2018	14/04/2018
4.3	The distance – learning training material	100	14/04/2018	14/04/2018

WP Outputs	Performance Indicators	% Achieved	Number reached so far	COMMENTS
4.1. The developed training materials	Definition of requirements	100%		
	Adopting the existing training courses to local needs	100%		
4.2. The new training material	Working equipment's with experiments booklets	100%		
	Design and develop the new courses, tailored to local conditions	100%		
4.3. The distance learning material	Definition of specifications for the software, work stations and printers that will be used	100%		
	Identification of needs from EG/JOR universities	100%		
	All necessary software installed	100%		

### 3.2 Progress of WP5

Deliverable n.	Deliverable title	% Achieved	Delivery date (according to application)	Actual delivery date
5.1	Preparation of laboratories	70 %	14/08/2016	In Progress
5.2	Mounting of experimental rigs and lab development	40%	14/01/2017	In progress
5.3	Development of the training setup	20%	14/04/2017	In progress
5.4	Development of the training documentation	10%	14/04/2017	In progress
5.5	Development of e-learning training docs courses	60%	14/10/2017	In progress

WP Outputs	Performance Indicators	% Achieved	Number reached so far	COMMENTS
5.1. Preparation of laboratories	Tenders and purchasing orders for EG	70%	2	All Egyptian partners have done their tenders
	Tenders and purchasing orders for JOR	0%	0	JOR partners did their tenders and waiting for offers
5.2. Mounting of experimental rigs and lab development	Working equipment's with experiments booklets	40%	0	ASU, NU, HU received all of its equipment AASTMT, received some of its equipment and mounted them
5.3. Development of training setup	Training for the operating staff	20%	0	Technicians have training on the equipment received



<b>5.4. Development of the training documentation</b>	Booklets ad reports	10%	0	Booklets for the received training kits is prepared
<b>5.5. Development of the e-learning docs courses</b>	Training courses materials	60%	0	All 5 v course for training are developed but not uploaded on the e learning system yet

### 3.3 Progress of WP6

Deliverable n.	Deliverable title	% Achieved	Delivery date (according to application)	Actual delivery date
<b>6.1</b>	Attend advanced short courses in EU	100%	14/12/2016	July 2017
<b>6.2</b>	Training in Egypt and Jordan by EU staff	80%	14/11/2017	In progress

WP Outputs	Performance Indicators	% Achieved	Number reached so far	COMMENTS
<b>6.1. Attend advanced short courses in EU</b>	Advanced Short course in UCY	100%	N/A	It was implemented on 6 <sup>th</sup> to 10 <sup>th</sup> of March 2017 at University of Cyprus in Cyprus.
	Advanced Short course in Lisbon	100%	N/A	It was implemented on 26 <sup>th</sup> to 28 <sup>th</sup> of April 2017 at Instituto Superior Technico in Lisbon.
	Advanced Short course in UNIOVI	100%	N/A	It was implemented from 10 to 14 July 2017.
<b>6.2. Training in Egypt and Jordan by EU staff</b>	Training in AASTMT (Egypt) by EUROTraining	100%	N/A	It was implemented on 17 <sup>th</sup> to 19 <sup>th</sup> of July 2017.
	Training in HU (Egypt) by UCY	100%	N/A	It was implemented on 26 <sup>th</sup> to 28 <sup>th</sup> of September 2017.
	Training in MU Jordan by UCY	100%	N/A	It was implemented on 10 <sup>th</sup> of October 2017.
	Training in UJ by UNIOVI	100%	N/A	It was implemented in October 2017.
	Training in NU Jordan by SU	100%	N/A	Instead of training in NU, it was implemented by SU one-day workshop during the ICT conference on 5 <sup>th</sup> of December 2017 in Cairo.
	Training in ASU (Egypt) by UNIOVI	100%	NA	It was implemented on 12 <sup>th</sup> -13 <sup>th</sup> November 2017.
	Training in UJ (Jordan) by EUROTraining	100%	N/A	It was implemented on 13 <sup>th</sup> to 15 <sup>th</sup> of December 2017.
	Training in ALEXSEEDS (Egypt) by IST	100%	N/A	It was implemented on 26 <sup>th</sup> to 28 <sup>th</sup> of March 2018.

### 3.4 Progress of WP7

Deliverable n.	Deliverable title	% Achieved	Delivery date (according to application)	Actual delivery date
<b>7.1</b>	Attend training courses in EU	~66%	14/6/2017	In progress
<b>7.2</b>	Training in Egypt and Jordan by EU trainers	N/A yet	14/11/2017	N/A yet



WP Outputs	Performance Indicators	% Achieved	Number reached so far	COMMENTS
<b>7.1. Attend training courses in EU</b>	Training in SU	100%	N/A	Implemented on the 23 <sup>rd</sup> to 27 <sup>th</sup> of October 2017
	Training in Eurotraining	100%	N/A	Implemented on the 21 <sup>st</sup> to 23 <sup>rd</sup> of November 2017
<b>7.2. Training in Egypt and Jordan by EU trainers</b>				

### 3.5 Progress of WP8

Deliverable n.	Deliverable title	% Achieved	Delivery date (according to application)	Actual delivery date
<b>8.1</b>	Preparing documentation for accreditation in EG with ECTS	80%	14/11/2017	In progress
<b>8.2</b>	Preparing documentation for accreditation in JOR with ECTS	100%	14/11/2017	1/8/2016

WP Outputs	Performance Indicators	% Achieved	Number reached so far	COMMENTS
<b>8.1. Preparing documentation for accreditation in EG with ECTS</b>	Delivering the report for accreditation application by AASTMT	100%		The report has been done and submitted
	Gaining the Accreditation from the Higher Educational Supreme Council	80%		The HESC of Egypt took long time to reply back and a visit will be conducted by the end of July 2018 for facility inspections Still in Progress
<b>8.2. Preparing documentation for accreditation in JOR with ECTS</b>	Delivering the report for accreditation application by MU	100%		The report has been done and submitted
	Gaining the Accreditation from the Higher Educational Supreme Council	100%		MU had been granted the accreditation

### 3.6 Progress of WP9

Deliverable n.	Deliverable title	% Achieved	Delivery date (according to application)	Actual delivery date
<b>9.1</b>	Preparing necessary doc for double degree	100%	M26	M18
<b>9.2</b>	Official Meetings between AASTMT and IST Double Deg	100%	M28	M17



9.3	Official Meetings between AASTMT and IST Double Deg	100%	M30	M26
9.4	Signing the agreement	70%	M36	M36

WP Outputs	Performance Indicators	% Achieved	Number reached so far	COMMENTS
9.1 Preparing necessary docs for double degree	Requirements from IST	100%		
	Requirements from AASMT	100%		
9.2 Official Meetings between AASTMT and IST Double Deg	Meeting to discuss the alignment of the requirements	100%		
	Meeting to discuss and sign the MoU	100%		
9.3 Official Meetings between MU and IST Double Deg	Meeting to discuss the alignment of the requirements	100%		
	Meeting to discuss and sign the MoU	0%		
9.4 Signing the Agreement				

### 3.7 Progress of WP10

Deliverable n.	Deliverable title	% Achieved	Delivery date (according to application)	Actual delivery date
10.1	Advertising Campaign	55%	14/10/2018	In progress
10.2	Workshops and conferences	67%	14/10/2018	In progress

WP Outputs	Performance Indicators	% Achieved	Number reached so far	COMMENTS
10.1. Advertising campaign	Advertising for EG industrial sectors	50%	N/A	AASTMT during the workshop of industrial Job –Fair 2018. Similar workshop was held in May 2017 in Jordan 2018. Advertisement in Jordan during Meeting for Academia- Industry Council for other Erasmus+ project (FOODQA) in November 23th, 2017.
	Advertising for the JOR industrial sectors	60%	N/A	Advertisement in Jordan The 6th Global Conference on Renewables and Energy Efficiency for DEsert Regions (GCREEDER-2018) in April 3th-5th 2018, Amman – Jordan.
10.2. Workshops and conferences	2 regional workshops in Egypt and Jordan	67%	N/A	During the fifth semester, the Second official workshop of the conference was held on 6th of December 2017 in Egypt.



1 final conference	N/A	N/A
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### 3.8 Progress of WP11

Deliverable n.	Deliverable title	% Achieved	Delivery date (according to application)	Actual delivery date
11.1	Strengthening relationships with the industry	~60%	14/10/2018	
11.2	Marketing of the programme to ensure sustainability	~60%	14/10/2018	

WP Outputs	Performance Indicators	% Achieved	Number reached so far	COMMENTS
11.1. Strengthening relationships with the industry	Prepare the proper documentation for marketing of the programme	60%	N/A	The choice of performance indicator as preparing marketing documentation does not match well the WP outputs at this stage. However, major strengthening has been taking place especially after the on-site visit of the partners.
11.2. Marketing of the programme to ensure sustainability	Conducting marketing campaign	60%	N/A	Involved personell were present from industry and academia to witness the on site visit to Alexseeds and was a good chance to market the project on both industrially and academically.

### 3.9 Progress of WP12

Deliverable n.	Deliverable title	% Achieved	Delivery date (according to application)	Actual delivery date
12.1	Monitoring by Eurotraining on EG/JOR partners' management	~83%	14/10/2018	
12.2	Monitoring by Eurotraining on EU partners' management	~83%	14/10/2018	

WP Outputs	Performance Indicators	% Achieved	Number reached so far	COMMENTS
12.1 Monitoring by Eurotraining on EG/JOR partners' management	Feedback surveys for trainings (16), workshops (2), meetings (4), conferences (2)	56%	14/25	Evaluation report of: <ul style="list-style-type: none"> <li>– KOM, held in Cairo</li> <li>– 2<sup>nd</sup> PM, held in Amman</li> <li>– Workshop in Amman</li> <li>– Training in AASTMT by Eurotraining</li> <li>– Training in HU by UCY</li> <li>– Training in MU by UCY</li> </ul>



				<ul style="list-style-type: none"> <li>– Training in UJ by UNIOVI</li> <li>– Training in ASU by UNIOVI</li> <li>– Training in MU by SU</li> <li>– Conference in Cairo</li> <li>– Workshop in Cairo</li> <li>– 4<sup>th</sup> PM in Cairo</li> <li>– Training in UJ by Eurotraining</li> <li>– Training in ALEXSEEDS by IST</li> </ul>
	Semiannual reports (6)	~83%	5/6	Quality reports for the first, second, third, fourth and fifth semesters
<b>12.2 Monitoring by Eurotraining on EU partners' management</b>	Feedback surveys for trainings (6), meeting (1)	~85%	6/7	Evaluation report of: <ul style="list-style-type: none"> <li>– Training in UCY</li> <li>– Training in IST</li> <li>– 3rd PM in Lisbon</li> <li>– Training in UNIOVI</li> <li>– Training in SU</li> <li>– Training in Eurotraining</li> </ul>
	Semiannual reports (6)	~83%	5/6	Quality reports for the first, second, third, fourth and fifth semesters

### 3.10 Progress of WP13

Deliverable n.	Deliverable title	% Achieved	Delivery date (according to application)	Actual delivery date
13.1	Regional and International Coordination Meetings	80%	14/10/2018	Till end of the project
13.2	EG/JOR Institutional Management	80%	14/10/2018	Till end of the project
13.3	Coordination Meetings with group leaders	80%	14/10/2018	Till end of the project

WP Outputs	Performance Indicators	% Achieved	Number reached so far	COMMENTS
<b>13.1. Regional and International Coordination Meetings</b>	The kick off meeting was held in Alexandria Egypt, January 2016. 2 <sup>nd</sup> meeting in Jordan, November 2016 3 <sup>rd</sup> meeting in Portugal, April 2017. 4 <sup>th</sup> meeting in Egypt, December 2017.	80%	4	Should continue till end of the project
<b>13.2. EG/JOR Institutional Management</b>				There are 2 sub-coordinators for the project (AASTMT-Egypt and JUST Jordan)
<b>13.3. Coordination Meetings with group leaders</b>	Online meetings and one to one meeting. It is always happening on monthly bases, and in some cases on daily bases.	N/A	N/A	Group leaders' meetings have been arranged over the project life in regular bases and when is required. Some group leaders meeting



Horizontal Project Management Indicators			
<b>Effective and concerted project implementation</b>	Timely signing the consortium agreement	100%	happened during the training and workshop events
	A minimum of two teleconferences will be organized	100%	7
	No more than five adjustment decisions		
<b>External relations</b>	Positive management board relationships	N/A	N/A
	Exchanges with stakeholders through the platform and/or the social media	N/A	N/A
<b>Conflict resolution</b>	No conflicts between partners		N/A
<b>Risk management</b>	Corrective measures applied		N/A

#### 4. Evaluation of Project's Events and Activities

During the fifth semester of the project, the partnership held one Project Meeting (Cairo, 7/12/2017), one workshop (Cairo, 4/12/2017), one Conference (Cairo, 04-06/12/2017) and seven Trainings:

- In SU (23-27/10/2017)
- In MU by SU (11/2017)
- In UJ by UNIOVI (1/11/2017)
- In ASU by UNIOVI (12-13/11/2017)
- In Eurotraining (21-23/11/2017)
- In UJ by Eurotraining (13-15/12/2017)
- In ALEXSEEDS by IST (26-28/03/2017)

In the below pages, only some of the most significant aspects of these events' evaluation are presented, as a detailed presentation of the evaluation results was considered redundant for the purpose of the current report. *Please note*

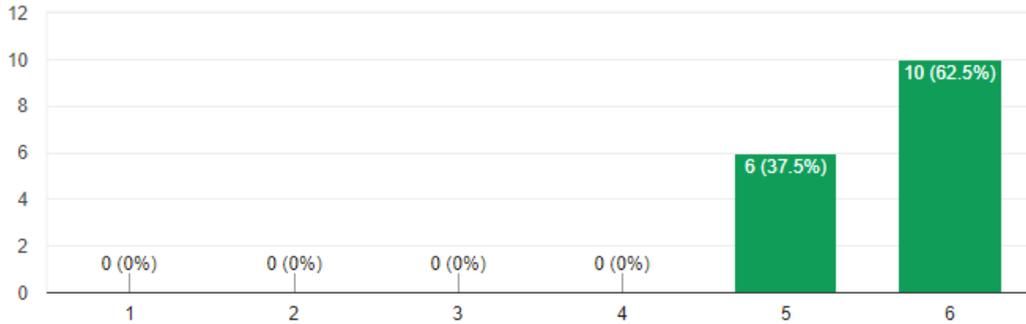


*that the full evaluation reports for all these events have been compiled by Eurotraining and are available to any interested party.*

#### 4.1 Training in SU

##### **Selection and topics were appropriate to my role and responsibilities.**

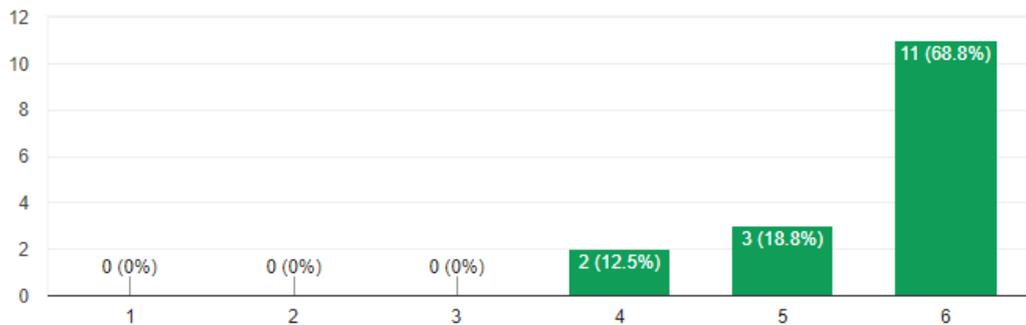
16 responses



Reviews were positive about the appropriateness of topics compared to participants' roles and responsibilities. Ten participants (62.5%) "totally agreed" that the topics were appropriate, while the rest six (37.5%) "agreed". Those results indicate that the training was well designed enough, in order to provide participants with topics that were sufficiently related to their roles and responsibilities.

##### **Visual and supporting material were useful and easy to follow.**

16 responses

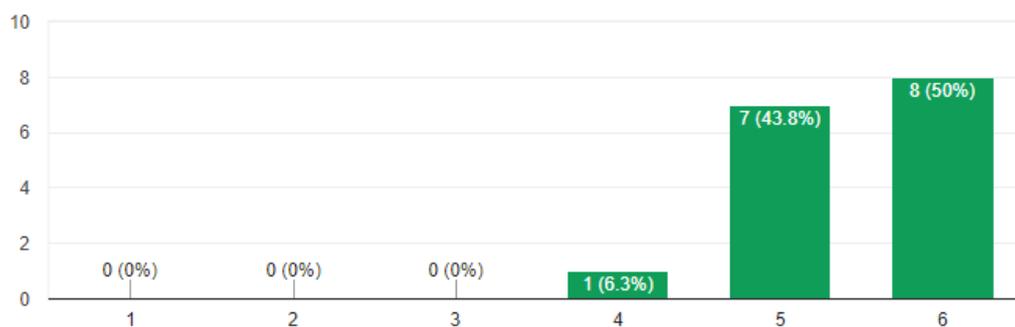




As far as the visual and supporting material that was used is concerned, most participants (68.8%) “totally agreed” that it was useful and easy to follow. Three out of sixteen participants (18.8%) “agreed” and another two (12.5%) “rather agreed” with that statement. In general, reviews of that aspect of the meeting can be thought as positive.

### How do you rate the duration, date and timing of the training?

16 responses



Participants’ opinions about the duration, date and timing of the training were distributed among the three most positive options. Half of participants (50%) evaluated those aspects of the training as “excellent”, seven participants (43.8%) as “very good”, and one (6.3%) as “good”. In overall, reviews were encouraging, although they could have been even better.

**Which aspects do you think could be improved for the next training sessions? Any additional comments?**



16 responses

more training (2)

One day execution to be added to the program...

Practical systems should be presented in the training such as micro-CHP and taking the readings from it. This will make the training much more interesting than presenting the results on slides. Furthermore, A field visit in the all buildings of the host university is urgently needed especially the science building in order to gain knowledge of such laboratories and makes us motivated to cope the technological developments of the host university.

The content could have been increased to match the time allocated throughout the training days.

Time efficiency, we may allocate more presentations in the same time frame. Thanks I, really very good training.

more training. welldone

It should contain more lecture in energy sector and management

I would like to have the presentations hands out. It is very essential to have them for future reference. I recommend that the material is given immediately after the training session. Some of the trainers were really great, If we can have them in Jordan for more training because the training session was short (yet excellent and very informative)

The field visit. Thanks

Time management

Candidates should be more careful while they are filling the visa applications to avoid the visa refusal.

Freqency of workshop. As everybody enjoy and learn from the training. Thank you all who was involved in this training

May be more numbers of participants will be good to have more mind storming as it happened in this training

I think , this questionnaire is one of the tools to improve the quality Also, I suggest to make a sustainable group for all partners to discuss and cooperate in all energy issues in the future . Thank you

Practical case studies for Energy Industrial Audit

## Final Remarks

As the analysis of the evaluation's results indicates, training can be characterized as very successful. Answers were ranged between options 4 to 6, with most of them were gathered mainly at the options from 5 and 6.

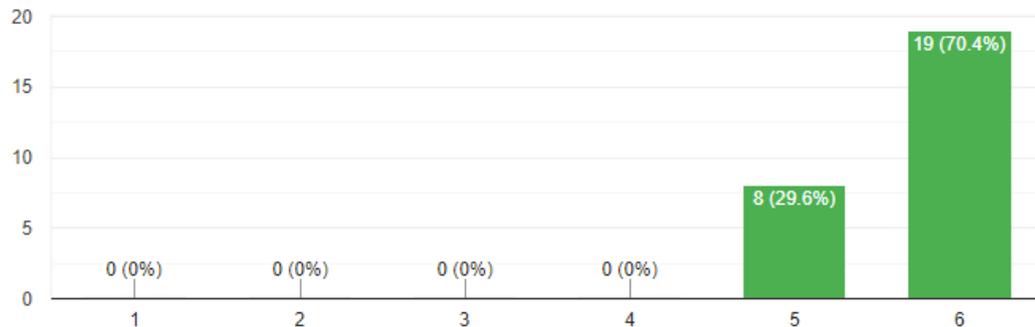
Very encouraging results were reported regarding the well – preparedness of the trainer, the improvement of participants' understanding of the subject after the training, and their ability to apply that knowledge. Minor issues came up, mainly, about the duration, date, and timing of the training.



## 4.2 Training in MU by SU

### The objectives of the training were clearly defined.

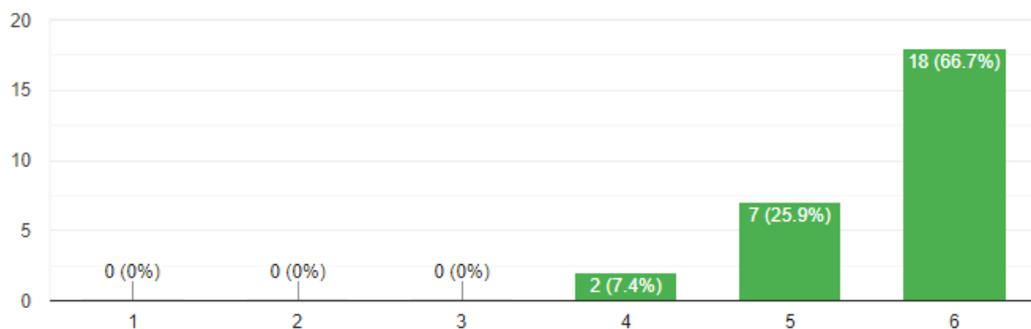
27 responses



In the first question, participants were asked to evaluate the clarity of definition of the training's objectives. Nineteen out of twenty-seven respondents (70.45%) "Totally agreed" that the objectives were clearly defined, while another eight participants (29.6%) "Agreed" with that.

### I will be able to apply the knowledge acquired.

27 responses

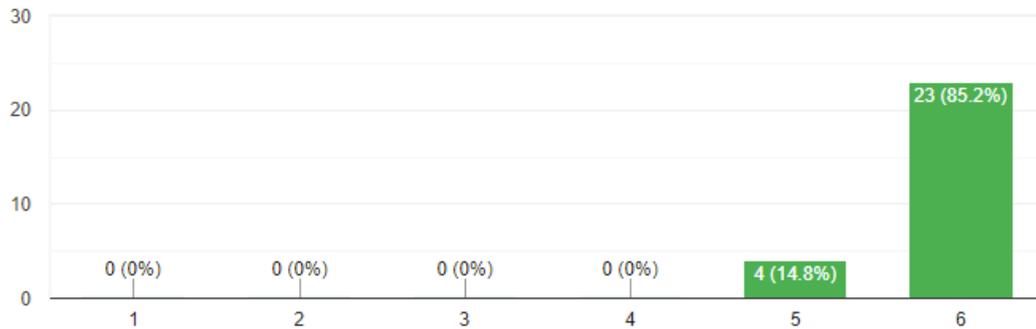


In this question, participants were asked about their future ability to apply the knowledge acquired during the training. Most of them, eighteen out of twenty-seven (66.7%) "Totally agreed" that they will be able to apply this knowledge, seven participants (25.9%) "Agreed" and two (7.4%) "Rather agreed". Responses indicate that all participants will utilize at some level the knowledge acquired, even though some of them were more confident than others in that end, a fact that can be attributed to different professional fields of expertise.



## The trainer was well prepared.

27 responses



In this question, the majority of participants (85.2%) “Totally agreed” that the trainer was well prepared for his/her role, while four participants (14.8%) “Agreed”. It can be safely said that the trainer satisfied the expectations of participants, contributing to the effectiveness of the training.

### Final Remarks

As the analysis of the evaluation’s results indicates, the training can be considered successful. The majority of responses were gathered among the best two options (options 5 and 6), while there were also some responses at the scale of 4.

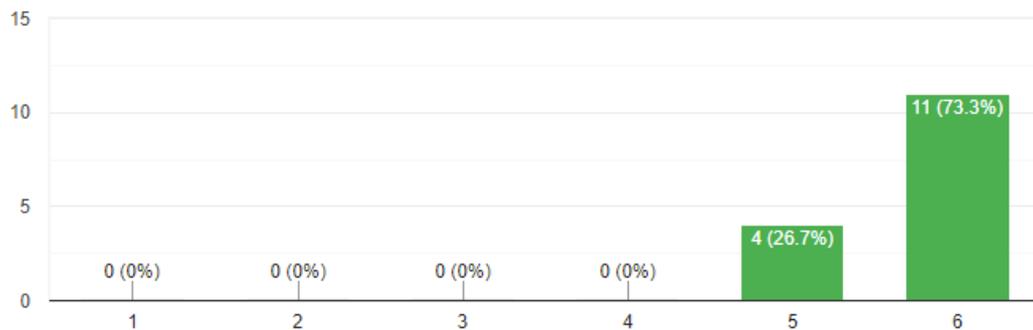
Participants’ opinions were most favorable regarding the clarity of the training’s objectives, the encouragement of participation and interaction, and the well-preparedness of the trainer. There might still be some room for improvement in the organization of the duration, date and timing of the training, all very important aspects for an effective training.



### 4.3 Training in UJ by UNIOVI

#### **Participation and interaction were encouraged.**

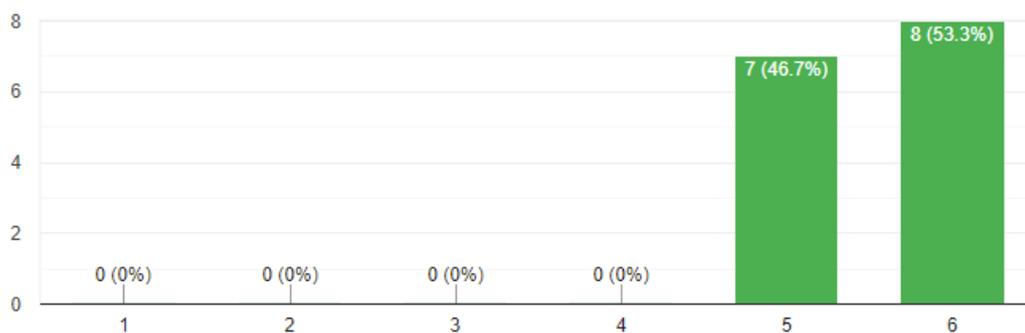
15 responses



Another significant aspect of the efficiency of the training is the level of participation of trainees, as well as the interaction among both trainees and trainees-trainer. In our case, most of participants (73.3%) “Totally agreed” and four (26.7%) “Agreed” that participation and interaction were encouraged during the training.

#### **There was a correct balance between theoretical exercises and discussion**

15 responses

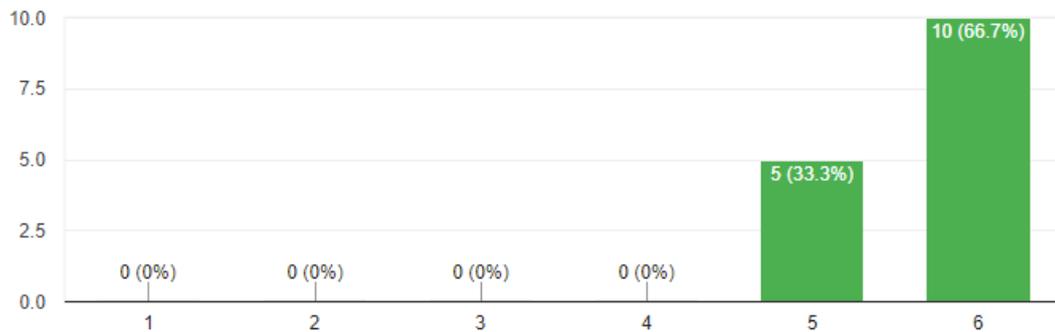


The responses regarding the balance between theoretical exercises and discussion were almost evenly distributed among the two better options. Eight participants (53.3%) “Totally agreed” and seven (46.7%) “Agreed” that the balance was correct, indicating that there might still be some room for improvement.



## The training objectives were met.

15 responses



In that question, participants expressed their views on the level of achievement of the training's objectives. Most of participants (66.7%) "Totally agreed" that objectives were met, while five (33.3%) "Agreed". Responses in that question may vary because of different perception of the original objectives or due to slight dissatisfaction regarding the results of the training.

## Final Remarks

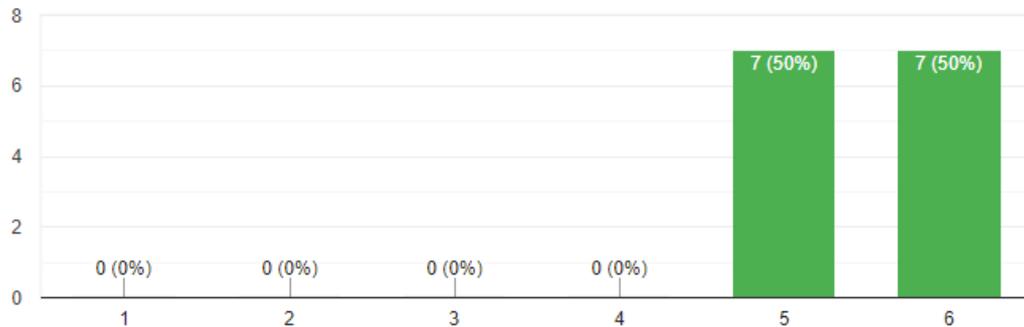
In overall, the training can be considered successful, as all responses received were distributed among the two better options, option 5 and 6. The most encouraging point of the evaluation was the improvement of participants' understanding on the subjects discussed and the encouragement of interaction and participation. On the other hand, extra effort may be needed in clarifying the objectives of the training and achieving the right balance between theoretical exercises and discussion.



#### 4.4 Training in ASU by UNIOVI

### The objectives of the training were clearly defined.

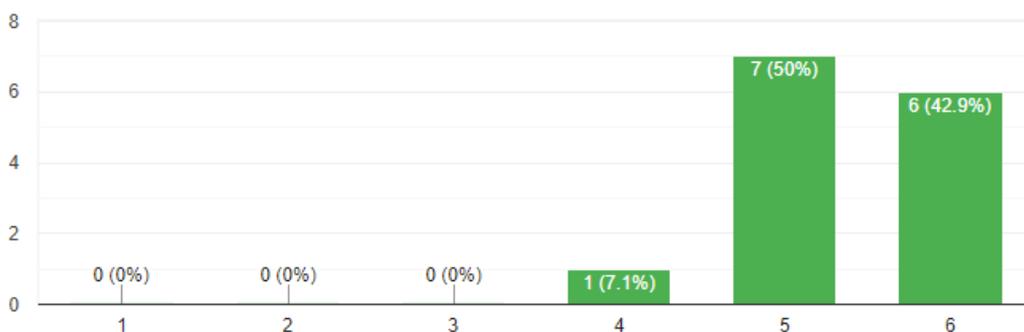
14 responses



In this first multiple-choice question, participants were asked to evaluate the clarity of the objectives of the training. Responses were equally distributed among the options “Totally agree” and “Agree”, indicating that half of participants might have wanted further clarifications on the foreseen objectives.

### Selection and topics were appropriate to my role and responsibilities.

14 responses

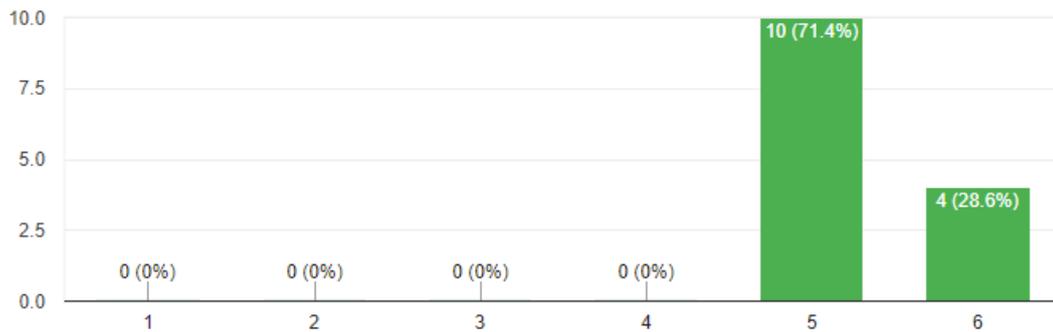


As far as the topics discussed during the training is concerned, six participants (42.9%) “Totally agreed”, seven (50%) “Agreed” and one (7.1%) “Rather agreed” that they were appropriate to their roles and responsibilities. Even though topics were not completely new to participants, respondents’ opinions expressed that the selection of topics could better reflect their roles.



## The training objectives were met.

14 responses



As for the level of achievement of the training's objectives, the vast majority of participants (71.4%) "Agreed" that objectives were met, while four participants (28.6%) "Totally agreed" with that. As results indicate, most participants do not seem to be fully satisfied by the achievement of the initial goals, even though their reviews are not discouraging.

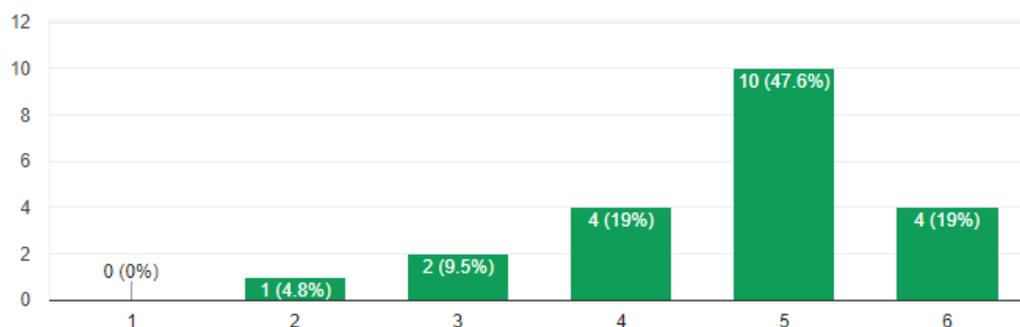
## Final Remarks

In overall, it can be said that the training provided a lot of feedback for improvement. Some of the most important aspects to be taken into consideration for next trainings are the usefulness of the visual and supporting material used, the balance between theory and discussion, the achievement of objectives, and the duration, date and timing of the training.

### 4.5 Training in Eurotraining

#### I will be able to apply the knowledge acquired.

21 responses

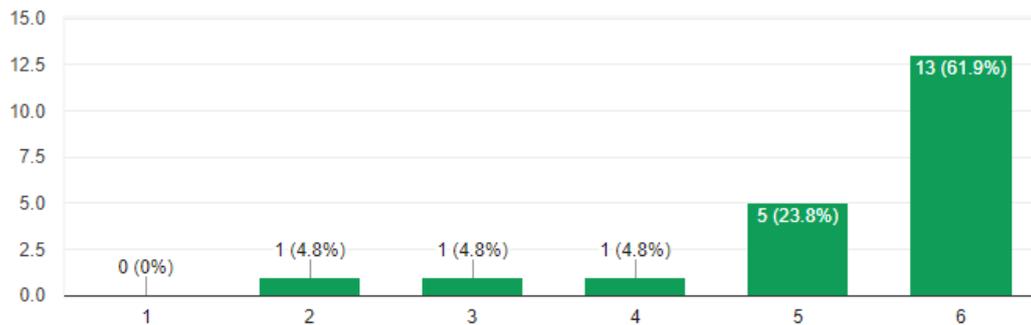




An important aspect of the training is to provide knowledge that can be later applied by participants. As results indicate, ten out of twenty – one (47.6%) “agreed” that they will be able to apply the knowledge they acquired, while four (19%) “totally agreed” and another four (19%) “rather agreed”. On the other hand, two participants (9.5%) “rather disagreed” and another one (4.8%) “disagreed” about their ability level to put that knowledge into practice. Although opinions on that matter are in general positive, some focus should be put on developing a training whose contents have a wider applicable aspect.

### Participation and interaction were encouraged.

21 responses



Except for the material presented during the training, another important feature of an effective training session is the participation and interaction of those involved. As results indicate, the majority of participants (61.9%) “totally agreed” that they were encouraged to participate and interact during the training, while 23.8% “agreed” and 4.8% “rather agreed”. However, there was also one participant (4.8%) who “rather disagreed” and another one (4.8%) who “disagreed” about the level of participation and interaction’s encouragement. In general, participants were satisfied by that aspect of the training, which can surely contribute to an overall positive evaluation.

### Which topics would you suggest for future training sessions?

This question was an open – ended question where participants were asked to recommend topics to be included to the next trainings. A variety of opinions can



be noted as respondents' suggestions were based on their personal fields of interest. All those suggestions should be considered when the schedule of the next trainings is being formed.

16 responses

Case studies
Practical
Energy Saving Optimization
smart cities and energy managemnet
Building Energy Managment
sustainable and smart systems
energy management system special for architects & to have a real or imaginary projects to make evaluation and to make implementations on them + sustainable smart system is an important topic too.
Smart Systems for Saving Energy
Smart cities and supply chain in sustainable energy
Energy Audit (ISO 5001)
Energy efficiency in Industry
Smart Cities
Energy Audit - Energy Saving
renewable energy of biogas systems and generate elecricity
Energy efficiency
smart cities

## Final Remarks

As the analysis of the evaluation's results indicates, training can be, in general, characterized as successful. Answers were ranged between all possible options, but most of them were gathered mainly at the options from 4 to 6.

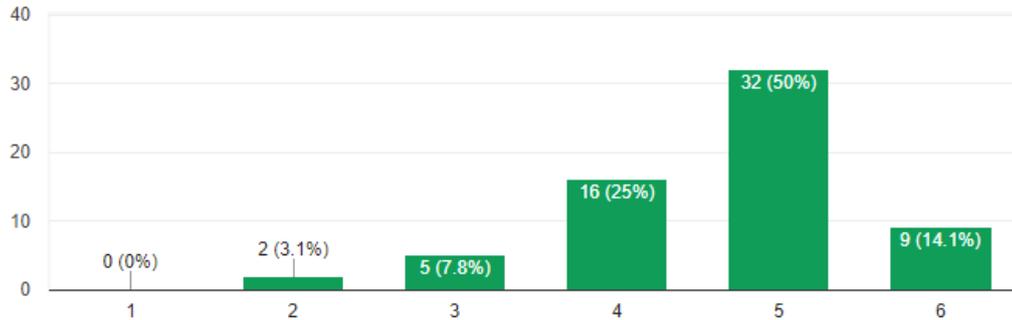
Encouraging results were noted regarding the well – preparedness of the trainer and the encouragement of participation and interaction during the training. Quite positive was, also, the evaluation of the duration, date and timing of the training. On the other hand, minor issues were detected regarding the achievement of the training's initial objectives and the future ability of some respondents to apply the knowledge they acquired during the training.



#### 4.6 Training in UJ by Eurotraining

##### **The objectives of the training were clearly defined.**

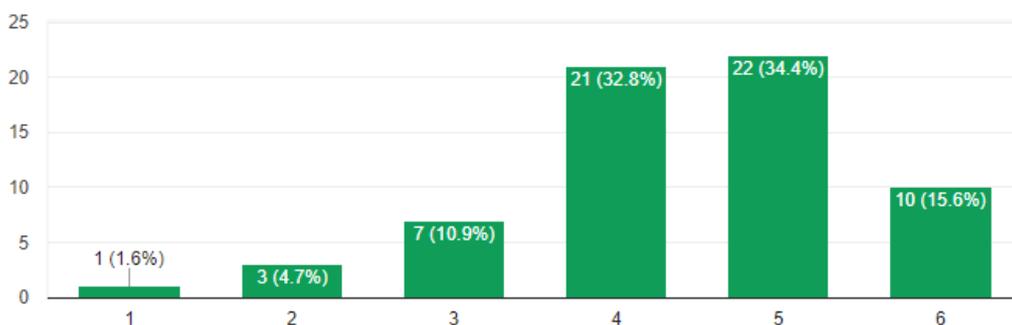
64 responses



In that question, participants were asked to evaluate the clarity of definition of the training's objectives. Exactly half of them (50%) "agreed" that the objectives were clearly defined, nine out of sixty – four participants (14.1%) "totally agreed", while sixteen (25%) "rather agreed". There were also five participants (7.8%) who "rather disagreed" about the clarity of the training's objectives, and two (3.1%) who "disagreed". In general, the results are quite positive, as the vast majority of participants was satisfied by that aspect of the training.

##### **The training improved my understanding of the subject.**

64 responses



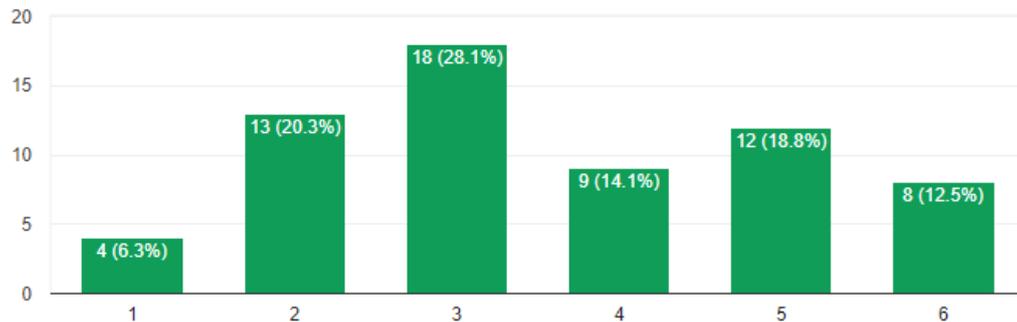
As an important function of every training is to provide additional knowledge to participants, this question is important in evaluating the effectiveness of the training. As results indicate, most participants (34.4%) "agreed" that the training improved their understanding of the subject, twenty – one participants (32.8%) "rather agreed", while ten (15.6%) "totally agreed". On the other hand, seven



participants (10.9%) “rather disagreed”, three (4.7%) “disagreed” and one (1.6%) “totally disagreed” that they had a better understanding of the subject after the training.

### How do you rate the duration, date and timing of the training?

64 responses



In that question, participants were called to evaluate the training in terms of duration, date, and timing. As the above graph shows, views were distributed among all options, indicating a variety of opinions. More specifically, eight participants (12.5%) found those aspects of the training “excellent”, twelve (18.8%) “very good”, and nine (14.1%) “good”. On the other hand, eighteen participants (28.1%) thought that the duration, date, and timing of the training were “balanced”, thirteen (20.3%) that they were “poor”, and another four (6.3%) that they were “very poor”. As already mentioned, safe conclusions on time issues of the training cannot be drawn, as the modification of the original schedule highly influenced management and allocation of time.

### Final Remarks

As the analysis of the evaluation’s results indicates, training can be, in general, characterized as successful, even though minor issues came up. Answers were ranged between all possible options, but most of them were gathered mainly at the options from 3 to 6.

Particularly good was the evaluation regarding the selection of topics, the clarity of objectives’ definition, and the achievement of the trainings’ objectives. On

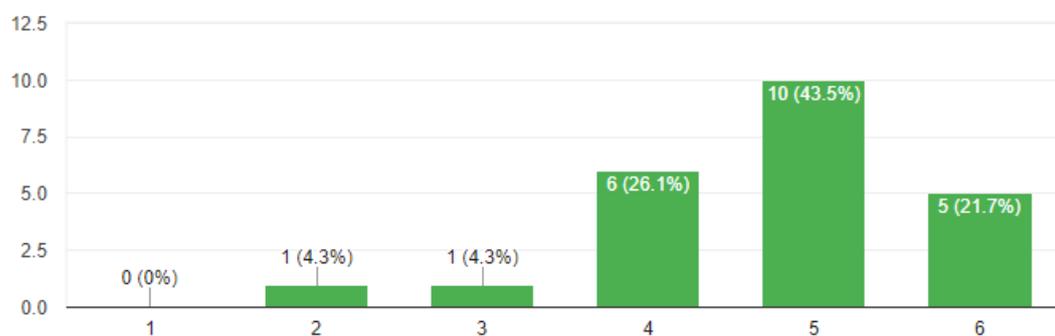


the contrary, less favorable were opinions about the encouragement of participation and interaction, as well as the duration, date and timing of the meeting. Again, it should be mentioned that before reaching any conclusions, the modification of the original training's schedule should be taken into consideration, as it is more than possible that it has affected participants' level of satisfaction.

#### 4.7 Training ALEXSEEDS by IST

##### **Selection and topics were appropriate to my role and responsibilities.**

23 responses

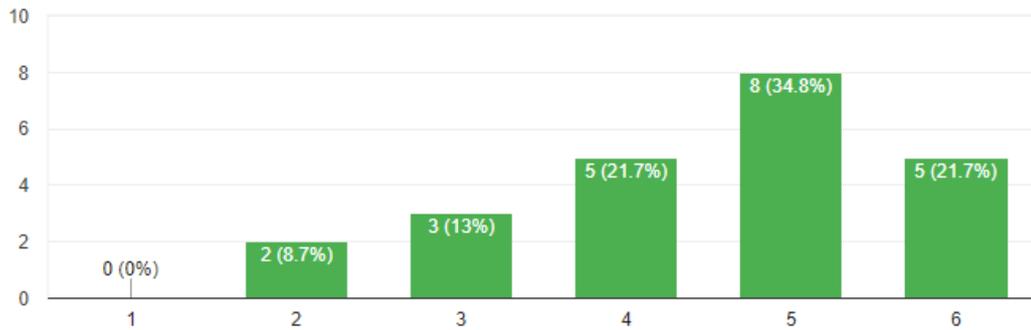


Regarding the topics of the training, responses were distributed among five of the six options. More specifically, five participants (21.7%) "Totally agreed" that the selection of topics were appropriate to their roles and responsibilities, ten (43.5%) "Agreed" with that, six (26.1%) "Rather agreed", one (4.3%) "Rather disagreed", and another one (4.3%) "Disagreed". This divergence of opinions might be due to different professional and academic backgrounds of participants, whose expectations varied too.



## Visual and supporting material were useful and easy to follow.

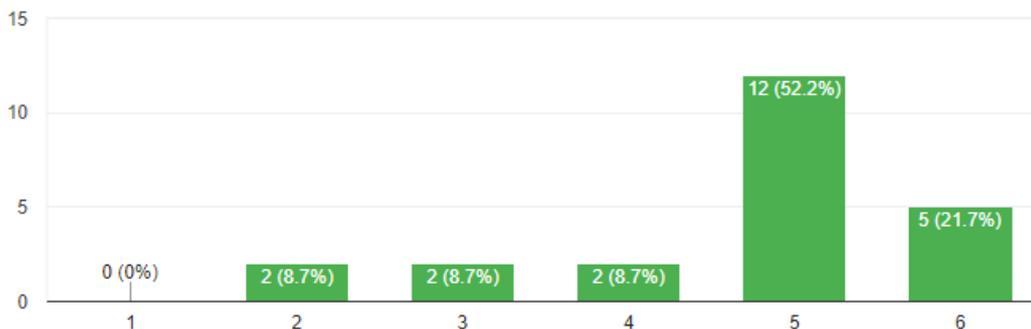
23 responses



In that question, participants were asked to evaluate the visual and supporting material that was used during the training, specifically its usefulness and easiness to follow. Responses were distributed among many answers, expressing a difference of opinions. Five participants (21.7%) “Totally agreed” that the used material was useful and easy to follow, eight (34.8%) “Agreed”, five (21.7%) “Rather agreed”, three (13%) “Rather disagreed”, and two (8.7%) “Disagreed”.

## The training objectives were met.

23 responses



As far as the objectives of the training is concerned, five participants (21.7%) “Totally agreed” that they were achieved, twelve (52.2%) “Agreed” and two (8.7%) “Rather agreed”. On the other hand, two out of twenty-three participants (8.7%) “Rather disagreed” and another two (8.7%) “Disagreed” regarding the achievement of objectives.



## Final Remarks

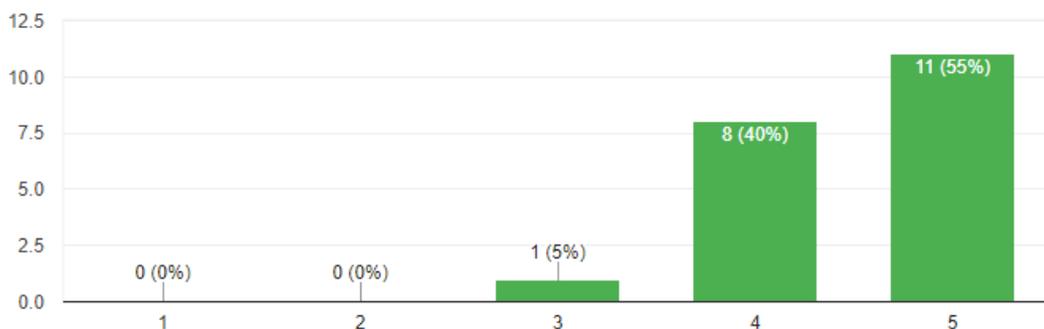
As the analysis of the evaluation's results indicates, training can be, in general, characterized as average. Answers were ranged between all possible options, expressing a great difference of opinions in some cases.

Encouraging results were noted regarding the participants' improvement of understanding of the subject, as well as the clear definition of the training's objectives. On the other hand, improvements should be considered on the visual and supporting material used, the encouragement of participation and interaction, the balance between theoretical exercises and discussion, and the duration, date, and timing of the training.

### 4.8 Workshop in Cairo

#### Overall, how would you rate the workshop?

20 responses

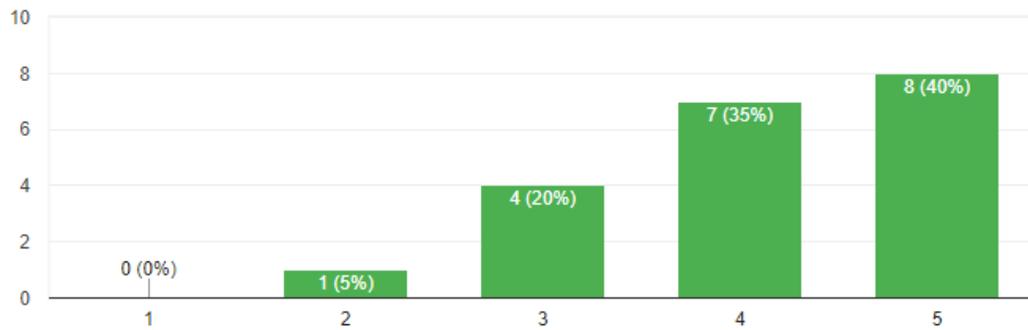


In that question, participants were asked to evaluate the workshop in overall terms. More than half of the participants (55%) found the workshop "Excellent", while another eight (40%) thought it was "Very good". One in twenty participants had a "Balanced" opinion for the workshop. Results indicate that, in general, participants were satisfied by the workshop, and only minor improvements could have been made.



## The time allocated for the workshop was sufficient.

20 responses



Except for the presentations given during the workshop, the allocated time to its activities is also crucial, as it can contribute to the effective implementation of its objectives. Responses here were diverse, and it seems that while some participants were satisfied by the allocated time, others did not find it sufficient enough. More specifically, eight participants (40%) “Strongly agreed” that time was sufficient, seven (35%) “Agreed”, four (20%) “Neither agreed, nor disagreed”, and one (5%) “Disagreed”.

## What should be improved? Please elaborate

20 responses

NA (3)
Nothing (2)
The workshop needed one more day
Splitting the workshop into two, one for those with just general interest and the other for the more technically oriented
To be organized as separate event
expand the subjects
„
Give more details for the ares
more hardware examples for real problem in smart system
Many thanks for your efforts
More details and longer session will be better for gathering complete understanding



The sessions were short and compact

NON

few people attended the presentations, maybe there were too many presentations in parallel

The workshop shop need more time and sessions.

more detailed info and clear overview.

Exceed time of workshops and containing different fields

## Final Remarks

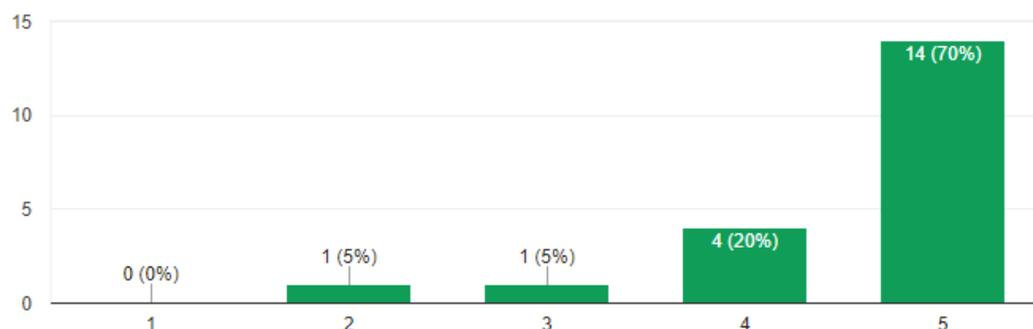
As the analysis of the evaluation's results indicates, the workshop can be, in general, characterized as successful with potential for improvement.

Encouraging results were noted regarding the quality of the presentations and the evaluation of the instructor/trainer. On the other hand, more effort could have been put on the structure of the workshop, the allocated time, and the opportunities offered to trainees to respond to the market needs of the relevant sector.

### 4.9 4th Project Meeting in Cairo

**The meeting was useful for establishing communication among partners.**

20 responses



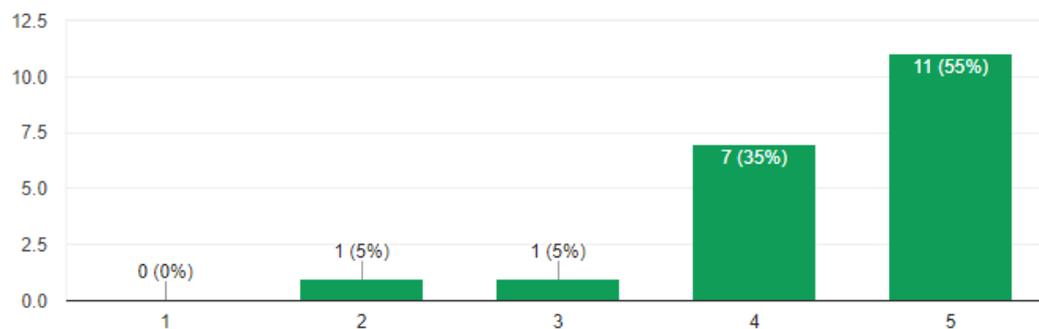
A significant objective of every project meeting is to establish a positive communication atmosphere among the partnership. As the above graph indicates, partners' opinions about that issue were mixed, too. Fourteen participants (70%) responded that the meeting was indeed "Very Useful" in establishing communication, four participants (20%) that it was "Useful", one



that is was “Neither useful, nor worthless”, and another one that it was “Not that useful”. Again, not all partners seem to be fully satisfied by that aspect of the meeting. Since communication is more than important for the successful and on time implementation of the project’s objectives, more focus should be placed on facilitating communication during the next meeting.

**After the meeting, my role and responsibility within the next project activities were clear.**

20 responses

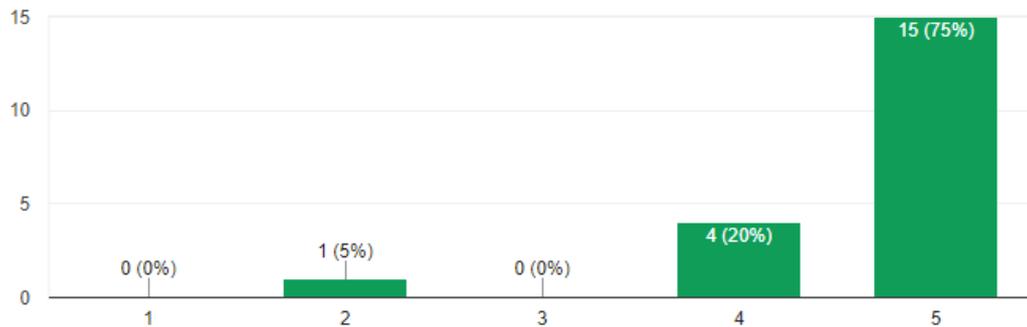


Participants were asked to evaluate the clarity of their roles and responsibilities within the next project activities. Eleven out of twenty participants (55%) responded that after the meeting, their respective roles and responsibilities were “Very clear”, seven (35%) that those issues were “Clear” to them, one that they were “Neither clear, nor unclear”, and one that they were “Rather unclear”. As results indicate, not all partners were completely sure about their responsibilities regarding the following project activities, an issue that can affect the overall implementation of the project. Project meetings are a great opportunity for partners to clarify any relevant vagueness, and more attention should be given to that aspect of the meetings.



## Were meeting activities organised in an efficient manner?

20 responses



In overall, the great majority of the meeting's participants, fifteen out of twenty (75%), found the meeting "Very efficient", and four (20%) "Efficient". There was, also, one participant who evaluated the organisation of the meeting as "Not that efficient". The organisation of the meeting's activities seem to have been satisfactory for almost all participants, which is a very good sign of a successful meeting.

### Final Remarks

It may be useful for partners to:

- clarify the objectives of the meetings so that every partner to know what to expect and be fully prepared
- intensify their efforts in communicating and ensuring that the partnership's size won't affect the project's implementation
- cooperate in setting clear work plans and deadlines for the project's results
- respect the timeline and deliver results and activities on time

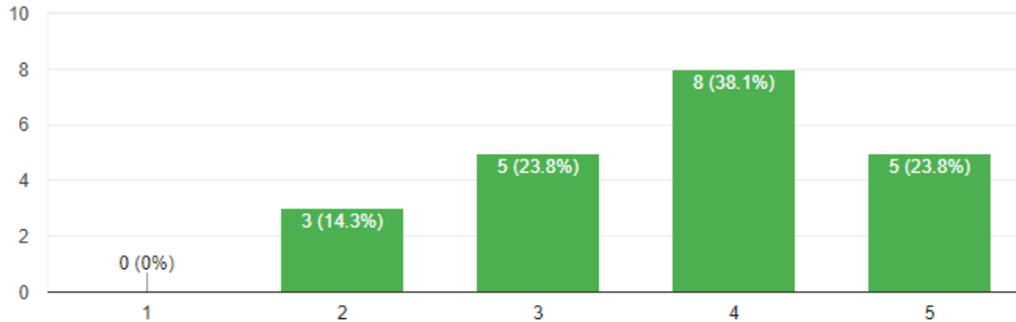
Partners should participate to the quality assurance process that has been agreed to ensure the quality of the project's results and activities. Gathering feedback that can contribute to the improvement of the project's implementation is of crucial importance for the effectiveness of the project and the achievement of its objectives.



#### 4.10 Conference in Cairo

### The level of interaction between speakers and participants was sufficient.

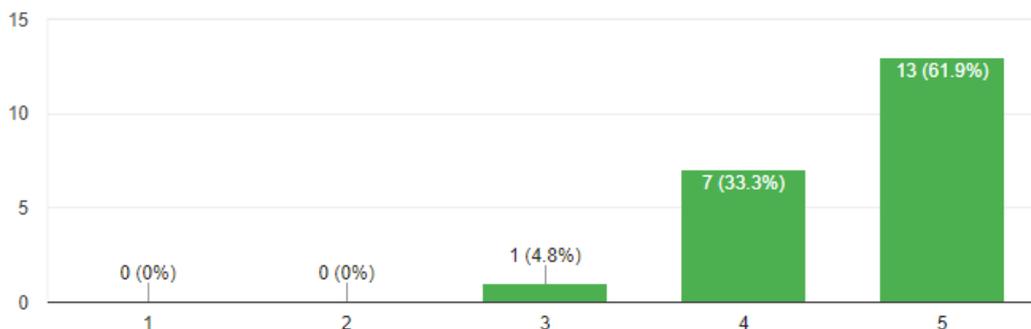
21 responses



In that question, attendees were asked to evaluate the level of interaction between speakers and participants. The answers were distributed in four options: five participants (23.8%) “Totally agreed” that interaction was sufficient, eight (38.1%) “Agreed”, five (23.8%) “Neither agreed, nor disagreed”, and three (14.3%) “Disagreed”. As interaction among speakers and participants is always a significant aspect of a Conference’s success, particular focus should be given in fostering communication, discussion and exchange of opinions between speakers and attendees, especially while preparing the International Conference that will be held at the end of the project.

### The Conference's coordination was satisfactory.

21 responses



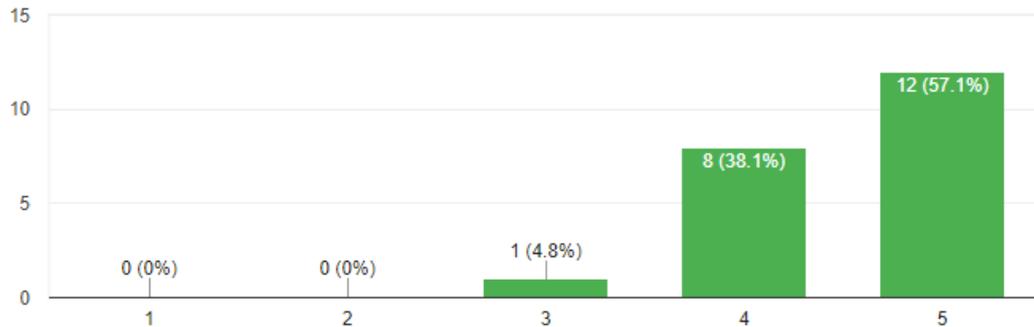
The majority of attendees, thirteen out of twenty-one (61.9%) evaluated the Conference’s coordination as “Very satisfactory”, seven attendees (33.3%) as “Satisfactory”, while one attendee’s opinion was “Balanced”. In general, those



are very encouraging results, as participants' opinions are favorable and express a positive review on the coordination of the event.

### **In general, I feel satisfied with the overall organisation of the Conference.**

21 responses



This final multiple-choice question asked attendees to rate the overall organisation of the Conference. Twelve participants (57.1%) responded that they were “Very satisfied” by the organisation, eight (38.1%) that they were “Satisfied”, while one participant’s (4.8%) opinion was “Balanced”. In general, that aspect of the Conference can be characterised as successful, as almost all participants were, at different levels, satisfied.

### **Final Remarks**

As the analysis of the evaluation’s results indicates, the Conference can be, in general, characterized as successful. Answers were ranged between four out of five options (meaning all options except for the very negative one), while most answers were gathered in the two most positive options and the neutral one.

Encouraging results were noted regarding the meeting of attendees’ expectations, the clarity of the event’s objectives, the Conference’s venue and its overall organisation. On the other hand, the level of interaction between speakers and participants and the duration and timetable of the event, are issues that can be further improved in the framework of the organisation of the International Conference at the end of the project.



## Conclusions

The overall feedback gathered by both partners and participants of the Project's activities (trainings, workshop and Conference) was, in general terms, encouraging.

Many partners identified that time management and respect of the agreed deadlines were challenging, and as a result some delays were reported. Even though the partnership works in a very positive atmosphere, more frequent communication was recommended by some partners.

Regarding the trainings implemented during this semester, results were satisfactory, although there is still room for improvement. Most of the issues indicated for future reference addressed the duration and timing of the trainings, as well as the visual and supporting material used. On the other hand, positive feedback was received for the trainers and encouragement of participation and interaction. The Workshop in Cairo was characterised as "Excellent" by the majority of participants, while most of participants were "Very satisfied" by the overall organization of the Conference, too. Similar results were reported for the 4<sup>th</sup> Project Meeting, where most partners were satisfied by the organization, even though more effort should be put on establishing communication.

The progress of the Project during the 5<sup>th</sup> semester can be considered positive, even though some delays have been reported. Partners should continue contributing to the quality assurance process to ensure that any challenges or obstacles are addressed as soon as possible and do not affect the overall implementation of the project or its results' quality.