



**Expert Facility Activity No: EFS-LB2**  
**Private Sector Involvement in Water Infrastructure**  
**with emphasis on Wastewater Treatment Plants**  
**Training Report: Procurement of Public-Private**  
**Partnerships in the Water/Wastewater Sector**

**May 2018**

Version	Document Title	Author	Review and Clearance
V1	Training Report: Procurement of Public-Private Partnerships in the Water/Wastewater Sector	Jan Janssens	Suzan TAHA



## THE SWIM AND H2020 SUPPORT MECHANISM PROJECT (2016-2019)

---

The SWIM-H2020 SM is a Regional Technical Support Program that includes the following Partner Countries (PCs): Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, [Syria] and Tunisia. However, in order to ensure the coherence and effectiveness of Union financing or to foster regional co-operation, eligibility of specific actions will be extended to the Western Balkan countries (Albania, Bosnia Herzegovina and Montenegro), Turkey and Mauritania. The Program is funded by the European Neighborhood Instrument (ENI) South/Environment. It ensures the continuation of EU's regional support to ENP South countries in the fields of water management, marine pollution prevention and adds value to other important EU-funded regional programs in related fields, in particular the SWITCH-Med program, and the Clima South program, as well as to projects under the EU bilateral programming, where environment and water are identified as priority sectors for the EU co-operation. It complements and provides operational partnerships and links with the projects labelled by the Union for the Mediterranean, project preparation facilities in particular MESHIP phase II and with the next phase of the ENPI-SEIS project on environmental information systems, whereas its work plan will be coherent with, and supportive of, the Barcelona Convention and its Mediterranean Action Plan.

The overall objective of the Program is to contribute to reduced marine pollution and a more sustainable use of scarce water resources. The Technical Assistance services are grouped in 6 work packages: WP1. Expert facility, WP2. Peer-to-peer experience sharing and dialogue, WP3. Training activities, WP4. Communication and visibility, WP5. Capitalizing the lessons learnt, good practices and success stories and WP6. Support activities.



### **Acknowledgements:**

Special thanks need to be directed to the Lebanese Ministry of Energy and Water; namely Dr. Fadi Comair (Director General of Hydraulic and Electrical Resources), and Mona Faqih, (Director of Water and SWIM-H2020 SM Focal Point) for their personal and institutional support in the organisation of the training. Acknowledgement is also due to Maya Chamli from the High Council for Privatisation and PPPs for her invaluable contribution before and during the training. Also sincere gratitude is in order here for Barbara Tomassini from GWP-MED for her close follow up and facilitation of the workshop organisation.

### **Disclaimer:**

This publication was produced with the financial support of the European Union. Its contents are the sole responsibility of the SWIM-H2020 SM Project and do not necessarily reflect the views of the European Union.



## TABLE OF CONTENTS

---

<b>1</b>	<b>GENERAL INTRODUCTION.....</b>	<b>7</b>
1.1	<u>RATIONALE OF ACTIVITY.....</u>	<u>7</u>
<b>2</b>	<b>OBJECTIVES OF ACTIVITY.....</b>	<b>8</b>
<b>3</b>	<b>EXPECTED RESULTS OF ACTIVITY.....</b>	<b>8</b>
<b>4</b>	<b>PROFILE OF THE PARTICIPANTS.....</b>	<b>9</b>
<b>5</b>	<b>EVALUATION OF THE EVENT .....</b>	<b>10</b>
5.1	<u>RESULTS of the event.....</u>	<u>10</u>
<b>6</b>	<b>ANALYSIS OF THE RESULTS OF THE TRAINING COURSE .....</b>	<b>14</b>
<b>7</b>	<b>CONCLUSIONS &amp; OVERALL ASSEMENT .....</b>	<b>15</b>
<b>8</b>	<b>ANNEXES.....</b>	<b>16</b>
8.1	<u>Agenda .....</u>	<u>16</u>
8.2	<u>LIST OF PARTICIPANTS.....</u>	<u>17</u>



## LIST OF TABLES

Table 1: No. of participants attending per day (d) or group of days.....	10
Table 2: Results of the evaluation of the organization, administrative and planning issues...	11
Table 3: Results of the evaluation of the technical aspects of the training .....	12
Table 4: Assessment by the trainer .....	13
Table 5: Workshop participation/ demographics .....	14
Table 6: Evaluation of the results of the quiz: .....	14



## ABBREVIATIONS

---

D	day
EF	Expert Facility
HCPP	High Council for Privatisation and PPPs
MoEW	Ministry of Energy and Water
PPP	Public-Private Partnerships
PSP	Private Sector Participation
D	day
EF	Expert Facility
HCPP	High Council for Privatisation and PPPs
MoEW	Ministry of Energy and Water
PPP	Public-Private Partnerships
PSP	Private Sector Participation



# 1 GENERAL INTRODUCTION

---

Within the scope of the Expert Facility (EF) work package (WP1), the EU-funded “Sustainable Water Integrated Management & Horizon 2020 - Support Mechanism (SWIM-H2020 SM)”, in cooperation with the Ministry of Energy and Water (MoEW) and the High Council for Privatisation and PPPs (HCPP) conducted a 3-day workshop on Procurement of Public-Private Partnerships (PPP) in the Water/Wastewater Sector.

The workshop took place following a fact finding mission that was carried out by the project with a view to develop guidelines for PPP Procurement in the water/wastewater sector (Task 7a in SWIM-H2020 SM, EFS-LB-2). Building on those Guidelines (that were developed within the overall framework provided by the new PPP legislation); the workshop was designed and developed in close coordination with the MoEW and HCPP with valuable contribution from the Lebanese Water Project (LWP)-USAID project. The workshop also leveraged the current experiences of the Council for Development and Reconstruction (CDR) and WEs and aligned concepts and definitions of PPPs in Water Supply and Sanitation (WSS) throughout the capacity building/training programs.

**The workshop was divided in two Parts:**

## **Part 1: Day 1/ (24 April)**

An introductory policy session, intended for High level Officials of Ministries and Agencies related to PPPs, as well as for all those who are involved with procurement of water/wastewater infrastructures, etc.

## **Part 2: Days 2 and 3 (25 and 26 April)**

An in-depth training for those directly involved in the procurement of PPPs in the water and wastewater infrastructure, in designing/analysing outsourcing options and in the management and control of respective contracts.

## 1.1 RATIONALE OF ACTIVITY

---

Lebanon has actually started working on PSP and PPP in the 1990's. In 2003, first law on PPP was prepared under the request of the Prime Minister Rafiq El Hariri and applied to river basins using BOT and DBOT. In 2008, the focus was on the enabling environment for PSP and PPP with the support of the MED EUWI/GWP-Med and OECD, and gaps and needs of the sector were both assessed. In 2017, the assessment was expanded in the framework of the “Governance and Financing of the Mediterranean Water Sector” funded by SIDA implemented by GWP-Med together with SWIM-H2020 Support Mechanism. The role of private banks in supporting water related projects was also discussed (focussing on non-conventional water resources - water efficient devices, treated wastewater reuse, grey water reuse, rainwater harvesting, desalination of brackish water, etc.) during a national dialogue which also included the development of criteria for the selection of bankable projects in addition to discussions for



implementing some pilot projects to study and evaluate in detail the application of such criteria and projects in practice.

Recently (September 2017), framework legislation on PPP was adopted by the Parliament. However, constraints for PPP in water infrastructure in the country are still significant as highlighted in the assessment conducted within the framework of the Governance & Financing for the Mediterranean Water Sector project <sup>1</sup> in cooperation with SWIM-H2020 SM.

This training came to support the ongoing efforts in Lebanon to address the financial challenges that the water sector is facing with the aim to assist with the financial sustainability of the water sector and meeting the country's water needs. Currently, the Government estimates that financial contributions through the State budget and Official Development Assistance will not suffice to cover the sector's needs that have been identified by both the 10 Years Strategy Plan and the 2012 Ministry of Energy and Water Strategy. The needed investments for the planned infrastructure development in the water sector, including the "softer" management-related interventions (institutional, tariff, legal and regulatory reforms) are significant and come up against strong financing constraints.

Constraints to the application of PPP in the water/wastewater sector in Lebanon include institutional, organizational, operational, cost recovery/tariffs, financial (creditworthiness), and commercial issues. And despite some positive recent developments in the legal framework which calls for training of public sector staff and ongoing efforts by the HCPP in raising PPP awareness and education, there is still shortage of professional staff for sector specific PPP contract supervision and monitoring (contract compliance control).

PPPs are important tools, which can be used to assist the Government and Water Establishments in delivering more and better services. By concluding partnerships with the private sector, Governments can supplement its limited resources with those available from the private sector.

## 2 OBJECTIVES OF ACTIVITY

---

The general objective of the workshop (Task 7b in SWIM-H2020 SM, Activity EFS-LB-2) is to enhance understanding and improve the capacity of the relevant officials and staff in the water/wastewater sector in Lebanon in the procurement of public-private partnerships with emphasis on water and wastewater sector.

## 3 EXPECTED RESULTS OF ACTIVITY

---

- The participants' understanding of the framework conditions provided by the new PPP legislation (as it concerns water and wastewater infrastructure projects) is enhanced;

---

<sup>1</sup> Governance & Financing for the Mediterranean Water Sector and SWIM H2020 – SM (2017): Water Governance in Lebanon: Overcoming the Challenges to Private Sector Participation





- The capacity of the participants is developed with regards to the following:
  - Structuring PPP arrangements for water and wastewater infrastructure projects and differentiating the PPP process for different contract options including risk-sharing,.
  - Managing and monitoring risk in a PPP arrangement: risk allocation, risk allocation matrices, risk reduction and contract structuring.
  - Making the business case for PPPs in water and wastewater, including critical enabling pre-conditions for a successful and sustainable PPP framework.
  - Critical factors facilitating and barriers constraining PPP projects.
  - The contractual key elements of O&M contracts, with emphasis on wastewater treatment plants.
  - PPP contract management, supervision and contract compliance control.
- The participants are introduced to PPPs in other network infrastructure sectors (i.e. power sector).
- The guidelines for PPP procurement, tendering are introduced and discussed

## 4 PROFILE OF THE PARTICIPANTS

---

As mentioned previously, the workshop was divided in two Parts: During the first part, a total of 35 participants attended the workshop in addition to the SWIM-H2020 SM key water expert and the non-key experts (NKEs) (two NKEs; the PPP expert and communication specialist) and the MoEW support team. Being an introductory policy session, the first part of the training was attended by High level Officials of Ministries and Agencies related to PPPs (Directors and General Directors, Chiefs/Heads of Departments, Senior Advisors, Members of the Cabinet and the Social and Economic Council), as well as those who are involved with procurement of water/wastewater infrastructures including Engineers, Environment Specialists, Consultants, Economic Experts, Project Managers/Team Leaders, and Students.

During day 2, 18 participants attended and 17 during day 3 as per the distribution in Annex 6.2. An in-depth training was conducted during those two days for those directly involved in the procurement of PPPs in the water and wastewater infrastructure, in designing/analysing outsourcing options and in the management and control of respective contracts.

The participants for the whole training came from a wide range of institutions involved in PPP:

- Ministry of Energy and Water;
- Ministry of Environment;
- The Water establishments (WEs) ;
- Litani River Authority (including representatives advocating the national interest of Litani River) ;
- High Council for Privatisation and PPP;
- The Social and Economic Council;
- Municipalities;



- Office National du Liban etc.;
- Donors and international finance institutions which are active in the field of water and wastewater in Lebanon. (the World Bank, Food and Agriculture Organisation (FAO), USAID Lebanon Water Project(LWP);
- University of Saint-Joseph of Beyrouth (USJ);
- Private Sector including industries and consultants.

Table 1 shows the number of participants who attended one or more training day.

Table 1: No. of participants attending per day (d) or group of days

D1 only	D1 & D2	D1,D2 & D3	Day 2 only	Day 2 & 3	Day 3 only	Total
24	2	9	5	2	6	48

## 5 EVALUATION OF THE EVENT

### 5.1 RESULTS OF THE EVENT

Two categories of indicators were used to evaluate the workshop: i) evaluation indicators, reflecting the quality of the workshop logistics/ organisational aspects (See section A below) and the assessment of the technical quality of the workshop (See section B below), as perceived by the participants, ii) impact indicators, reflecting the direct impact of the workshop (See Section 6 below). The indicators and associated ratings are presented in Tables 2, and 3 respectively. Table 4 provides the specific remarks made by the non-key expert on the workshop (Section C below).

#### A. Organisational, administrative and planning issues before and during the event

A set of 10 criteria; A1-A10 (See table below) was assessed by the participants, using a qualitative description ranging between “Excellent” to “ Poor”, with an opportunity to provide suggestions for improvement. For the sake of comparison, the qualitative descriptions are given assigned numbers as follows: Excellent = 4      Good = 3      Average = 2      Poor = 1



Table 2: Results of the evaluation of the organization, administrative and planning issues

A. ORGANISATIONAL, ADMINISTRATIVE AND PLANNING ISSUES BEFORE AND DURING THE EVENT (8 forms were filled)		Number of Replies					Average Score (max = 4)
		EXCELLENT	GOOD	AVERAGE	POOR	Total Replies	
A1	Appropriate handling of invitations, visa support, information sharing and smoothing obstacles	1	6			7	3.14
A2	Efficient logistics: accommodation, transportation, location of venue and interpretation	1	7			8	3.13
A3	Provision of support (if requested) for participants' preparation for the event	1	3	2		6	2.83
A4	Efficient and effective follow-up of preparations and progress towards the event	2	6			8	3.25
A5	Planning for the event: selection and design of methodology, programme/daily agenda and work rules	1	7			8	3.13
A6	Smooth flow of programme, efficient handling of emerging needs and attentiveness to participants concerns	2	7			9	3.22
A7	Adequacy of the presentations (Presentations correspond and contribute to the planned objectives and are conducive to enhanced shared understanding and participation on addressed topics)	2	7			9	3.22
A8	Clarity, coverage and sufficiency of concepts, objectives, anticipated outputs	2	7			9	3.22
A9	Usefulness of the distributed material	2	4	1		7	3.14
A10	Efficiency and effectiveness of the facilitation	2	4			6	3.33
A11	Overall rating of the event	2	6			8	3.25

The overall rating of 3.25 out of four indicates that the event was well appreciated

**B. Feedback on Technical Aspects**

Table 3 below presents the feedback received from the participants on the technical aspects of the event

Table 3: Results of the evaluation of the technical aspects of the training

B. FEEDBACK ON TECHNICAL ASPECTS		No. of replies
<b>B1</b>	<b>Coverage of the event</b> In your opinion did the event cover (tick one of the following):	
	All the topics necessary for a good comprehension of the subject nothing more	6
	Some topics covered are not necessary	1
	Some additional topics should be included	2
	No reply	
	<b>Total Replies</b>	<b>9</b>
<b>B2</b>	<b>Level of difficulty</b>	
	Difficult	
	Adequate	8
	Elementary	
	No reply	
	<b>Total Replies</b>	<b>8</b>
<b>B3</b>	<b>Length of the training</b> In your view the workshop duration (tick one of the following):	
	Longer than needed	1
	Sufficient	5
	Shorter than required	
	No reply	1
	<b>Total Replies</b>	<b>7</b>
<b>B4</b>	<b>What is the most valuable thing you learned during the workshop (knowledge or skills)?</b>	
	<i>Long term procedure</i>	2
	<i>PPP work should be undertaken by many experts and an experienced coordinator</i>	1
	<i>Need for more events on the topic</i>	1
	<i>Multi-disciplinary topic</i>	2
	<b>Total Replies</b>	<b>6</b>
<b>B5</b>	<b>How do you think that the current event will assist you in your future work on the subject?</b>	
	<i>Use it in projects</i>	2
	<i>Understand the preparation and evaluation of PPPs</i>	1
	<i>"Etre conscient du contenu"</i>	1
	<b>Total Replies</b>	<b>4</b>
<b>B6</b>	<b>Please indicate whether (and how) you could transfer part of the experience gained from the event to your colleagues in your country?</b>	



B. FEEDBACK ON TECHNICAL ASPECTS		No. of replies
	<i>Transmit notes and presentations</i>	1
	<i>"Dans mon travail cela me permet d' aborder la question... des connaissances nouvelles et de l' experience du presentateur qu' il a exposee"</i>	1
	<i>Propose them to attend such trainings</i>	1
	<i>Use the knowledge in future work</i>	1
	<b>Total Replies</b>	<b>4</b>
<b>B7</b>	<b>What did you like most about this event?</b>	
	<i>The topics were fully covered</i>	1
	Q&A	1
	<i>Knowledge acquired</i>	1
	<i>Expertise of the trainer</i>	2
	<b>Total Replies</b>	<b>5</b>
<b>B8</b>	<b>What needs to be improved?</b>	
	<i>Need to discuss case studies</i>	3
	<i>Avoid the "one man show" in order to attract the participants' attention</i>	1
	<i>Larger room</i>	1
	<b>Total Replies</b>	<b>5</b>

### C. Remarks by the trainer

A set of nine criteria; B1-B9 (See table below) are used hereby by the trainer to provide an overall assessment of the event.

Table 4: Assessment by the trainer

B1	<b>Efficient and effective performance and interaction by participants:</b> the event was highly interactive with very active discussions on all the topics that were addressed.
B2	<b>Efficient and effective cooperation and team spirit;</b> PPP is gaining increased attention with the introduction of the new law. Due to the importance of the subject, and the diversity of the participating institutions, and the experience they were bringing with them, there was a lot of exchange and cross fertilisation between the officials which presented a good opportunity for the participants to learn from each other.
B3	<b>Level of achievement of planned objectives:</b> All the information and examples presented were received with impressive enthusiasm. See Table 6 below for the level of achievement of planned objectives and outcomes.
B4	<b>Did the event contribute to helping participants practice skills or gain knowledge related to course concepts:</b> yes.
B5	<b>What worked well during the event;</b> discussions within the group, and with the trainer,
B6	<b>What didn't work well and why:</b> Filling in the quizzes and evaluation forms. At the end of the workshop fewer people remained, and more response would have been possible if the training was not done in the home base of the participants.
B7	<b>What components/concepts did participants seem to understand well:</b> the concept of public-private-partnership as an instrument to improve efficiencies and to access private finance.
B8	<b>Were there any components/concepts that participants appeared to not understand:</b> the subtle difference between private sector participation, and, a partnership between public and private sector.



B9	<b>What aspects of the event could be improved and what to be kept:</b> Three of the participants who filled the evaluation form would have liked the inclusion of case studies. What worked well was the discussion between different participants. This could be the major highlight of the training.
----	---

## 6 ANALYSIS OF THE RESULTS OF THE TRAINING COURSE

The training succeeded to mobilise a significant number of organisations and stakeholders that are implicated in PPP as indicated in Table 5 below.

Table 5: Workshop participation/ demographics

Total No. of participants actually attending one or more training days	48
Total No. of participants Planned to attend	35
Planned/Actual	137%
Number of organisations/agencies/authorities that were represented	20
Gender balance (% of women participants)	54%
NGO representation: No. of participants from NGOs	20

Prior to the training workshop, a pre-training assessment questionnaire was distributed to test the level of knowledge of the participants in the various subjects of the training. The quiz was also distributed after the training to test the impact of the training. However, because few people remained at the end of the workshop, only seven participants of the 16 who filled the pre-training assessment questionnaire actually completed the post-training assessment.

The results of the quiz are summarised in table 6

Table 6: Evaluation of the results of the quiz:

Question	Changes in awareness, knowledge and skills	%
Q1	% of participants that were aware of the difference between PSP and PP prior to the workshop	0
	% of participants that were aware of the difference between PSP and PP after the workshop	0
Q2	% of participants that could identify the term mostly used for PPP Projects prior to the workshop	38%
	% of participants that could identify the term mostly used for PPP Projects after the workshop	86%
Q3	% of participants that could define the PPP transaction prior to the workshop	0
	% of participants that could define the PPP transaction after the workshop	14%
Q4	% of participants with improved knowledge of PPP governance prior to the workshop	56%
	% of participants with improved knowledge of PPP governance after the workshop	57%
Q5	% of participants that were aware of the type of the institutions that should sponsor PPP prior to the workshop	25%
	% of participants that were aware of the type of the institutions that should sponsor PPP after the workshop	43%



Q6	% of participants that could differentiate between Economic and Financial Viability prior to the workshop	19%
	% of participants that could differentiate between Economic and Financial Viability after the workshop	29%

As indicated above, the quiz was filled in by a limited number of participants. Some struggled with the English language. Overall the scores indicated that the workshop was well received and organized.

## 7 CONCLUSIONS & OVERALL ASSESSMENT

Below is an overall evaluation of the training workshop. It can be concluded that the expected outcomes of the workshop (as planned in the design phase) have been achieved. Table 7 below, describes how the planned outcomes were achieved.

Table 7: Level of achievement of training objectives and outcomes:

Planned outcomes as defined prior to the workshop	Have they been achieved?
<ul style="list-style-type: none"> <li>The participants' understanding of the framework conditions provided by the new PPP legislation (as it concerns water and wastewater infrastructure projects) is enhanced;</li> </ul>	Yes, through interactive presentations, discussions, and Q&A
<ul style="list-style-type: none"> <li>The capacity of the participants is developed with regards to the following: <ul style="list-style-type: none"> <li>Structuring PPP arrangements for water and wastewater infrastructure projects and differentiating the PPP process for different contract options including risk-sharing,.</li> <li>Managing and monitoring risk in a PPP arrangement: risk allocation, risk allocation matrices, risk reduction and contract structuring.</li> <li>Making the business case for PPPs in water and wastewater, including critical enabling pre-conditions for a successful and sustainable PPP framework.</li> <li>Critical factors facilitating and barriers constraining PPP projects.</li> <li>The contractual key elements of O&amp;M contracts, with emphasis on wastewater treatment plants.</li> <li>PPP contract management, supervision and contract compliance control.</li> </ul> </li> </ul>	Yes (by a dedicated presentation)
	Yes (by a dedicated presentation)
	yes
	Yes (by a dedicated presentation)
	Yes (by a dedicated presentation)
	Yes (by a dedicated presentation)
<ul style="list-style-type: none"> <li>The participants are introduced to PPPs in other network infrastructure sectors (i.e. power sector).</li> </ul>	Yes (by a dedicated presentation)
<ul style="list-style-type: none"> <li>The guidelines for PPP procurement, tendering are introduced and discussed</li> </ul>	Yes (by a dedicated presentation)



## 8 ANNEXES

### 8.1 AGENDA

	Part 1 of the workshop	Part 2 of the workshop	
	24 April 2018	25 April 2018	26 April 2018
<b>Chair person</b>	<b>MoEW</b>	<b>MoEW</b>	<b>MoEW</b>
<b>09:00 - 09:15</b>	Welcome & Objectives of the workshop Introduction to Day 1	Introduction to Day 2	Introduction to Day 3 Key Take-Aways from Day 2
<b>09:15 - 10:00</b>	Introduction to the newly introduced PPP related legislations and framework conditions for structuring PPP arrangements in WSS	The Credit worthiness Challenge, as a Prerequisite for PPP	Risk Assessment and Allocation, Risk Management and Mitigation
<b>10:00 - 11:00</b>	Towards a Common Understanding of PPPs in WSS	Performance-based Operator and Management Contracts: Key Elements	Stages in the PPP Bidding Process
<b>11:00 - 11:30</b>	Discussion, Q&A	Discussion, Q&A	Discussion, Q&A
<b>11:30 - 12:00</b>	Coffee Break	Coffee Break	Coffee Break
<b>12:00 - 13:30</b>	- Making the Business Case for PPP in WSS, Enabling Preconditions and Critical Factors facilitating and Barriers constraining PPPs  - Overall presentation of the draft Guidelines for PPP Procurement	DB(X) Options (DBO, DBL, DBFO, BOT): Key Elements	PPP Contract Management, Supervision and Contract Compliance Control
<b>13:30 - 14:00</b>	Discussion, Q&A	Discussion, Q&A	Wrap-up
<b>14:00 – 15:00</b>	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>





## 8.2 LIST OF PARTICIPANTS

No.		First Name	Last Name	Organization/Institution	Position	Email Address	Day 1	Day 2	Day 3
1	Mr	Abdulkader	Alamedine	Municipality of al mina	president	Abdulkader.alamedine@hotmail.com	x		
2	Mr	AHMAD	Damaj	MOE	Environment Specialist	a.damaj@moe.gov.lb	x	x	x
3	Mr	Anna Maria	Kachouh	USJ		Anna.kachouh@hotmail.com		x	
4	Mr	Antoinette	Sleiman	Office national du liban	Project department	antoinettesleiman@hotmail.com	x	x	x
5	Mr	Antoun	Maacoum	FAO	Project Manager	Antoun.maacoum@FAO.org	x		
6	Mr	Bassam	Jaber	LWP/DAI	Senior Advisor	Bjaber.motge@gmail.com	x	x	x
7	Mr	Bilal	Jouni	LRA	Chief Dep	bilojouni@gmail.com	x		
8	Mr	Clara	Haddad	USJ	Student	Haddadclara1995@gmail.com	x		
9	Mr	Cynthia	Mouzannar	USJ	Student	Cynthia.mzannar@hotmail.com		x	
10	Mr	Desiree	El helou	USJ	Student	Desireehelou95@hotmail.com	x		
11	Mr	Gaby	Nasr	Etablissement des Eaux du Liban Nord	Ingenieur/directeur de l'exploitation	nasrgaby@hotmail.com	x		
12	Mr	George	AKL	DAI	Deputy Chief of Party	george_akl@lebanonwater.net	x		
13	Mr	George	Issa	Future Pipe Industries	Project Manager	g.issa@futurepipe	x		
14	Mr	George	Rizk	MEW	Chief of department	georgerizk@gmail.com	x		
15	Mr	Georges	Fakhry	ECONOMIC AND SOCIAL COUNCIL	Member	g.fakhry@ces.gov.lb	x		
16	Mr	Ghada	Rida	EBML	CHIEF OF DEPARTMENT	Ghada.rida@gmail.com	x	x	x
17	Mr	Grace	Ammoury	Litani River authority	Head of tender departmant	gammoury@litani.gov.lb, graceammoury_77@hotmail.com	x	x	x



No.		First Name	Last Name	Organization/Institution	Position	Email Address	Day 1	Day 2	Day 3
18	Mr	Gracie	Elbarcha	USJ		elbarcha@un.org			x
19	Mr	Jalal	Abd Ali	Union of Tyr Region Municipality	Head of the tech. department	Jalaleng@gmail.com	x		
20	Mr	Jamil	Taleb	Dar Taleb					x
21	Mr	Joy	Geryes	USJ	student	joygeryes@gmail.com		x	
22	Mr	Khaled	Obeid	NLWE	President/Director General	obeidkhaled@hotmail.com	x		
23	Mr	Lina	Fares	World Bank		LFARES@WORLDBANK.OR	x	x	x
24	Mr	Mahmoud	Haidar	MEW		haidarmdb@hotmail.com	x	x	x
25	Mr	Marwan	Saade	MEW				x	x
26	Mr	Maya	Chamli	Higher council for privatization	Economic Expert, Project Manager	MCHAMLI@HCP.Gov.LB	x	x	
27	Mr	Milad	Mallah	Consultant Engineer	Engineer	miladmalah@yahoo.com	x	x	x
28	Mr	Mirna	Elbarcha	USJ		ELBARCHA@UN.ORG			x
29	Mr	Mona	Fakih	MEW			x		
30	Mr	Mona	Manana	MEW			x		
31	Mr	Mona	Moallem	USJ		Mona_moallem@yahoo.com		x	
32	Mr	Moufid	Duhyni	MEW		mfd195@hotmail.com	x		
33	Mr	Nadine	Khoury	USJ	Intern	Nadinekhoury5@hotmail.com			x
34	Mr	Nidal	Elakoum	MEW	Directaur de tutelle	Nidal.akoum@hotmail.com	x	x	x
35	Mr	Nour	Ghaoui	USJ	Intern	Nour_ghaoui_95@hotmail.com			x
36	Mr	Rim	Sanjar	USJ	Intern	r_sanjar@hotmail.com			x
37	Mr	Rizk	Rizk	BWE	PDG	Rizk.gerges.rizk@gmail.com	x		



No.		First Name	Last Name	Organization/Institution	Position	Email Address	Day 1	Day 2	Day 3
38	Mr	Rosy	Hindi	USJ	Student	Rosy_26@live.com	x		
39	Mr	Salah	Saliba	LWP/DAI	PPP Team Leader	salahsaliba@hotmail.com	x	x	
40	Mr	Samar	Hijazi	MEW	Engineer	Samar.nHijazi@gmail.com	x		
41	Mr	Sana	Haidar	USJ	Student	Sana.haidar95@gmail.com	x		
42	Mr	Shadi	Jenzarli	Municipality of Al mina	Head of cabinet	Ch.jenzarli@hotmail.com	x		
43	Mr	Simar	Atwi	USJ	Student	Simar.atwi@live.com	x		
44	Mr	Solonj	Basil	MEW	Head of cabinet		x		
45	Mr	Tania	Haddad	USJ	Translator	taniatex@hotmail.com		x	
46	Mr	Zaher	Skaff	Municipality of Tripoli	Head of Dept. Excutive Dept.	Zaher_ing@hotmail.com		x	x
47	Mr	Zahra	Bahlawane	The national interest of litany river	Department of issues	Bahlawan.zahra@gmil.com	x		
48	Mr	Zeina	Karnib	USJ	Student	Zeina.k88@gmail.com	x		
49	Ms	jizel	Matri	MEW	Editor		x	x	X
50	Mr	Ali	Ghrayeb	MEW	It Admin.	mew@terra.net.lb	x		
51	Mr	Marwan	Saade	MEW	It Admin.		x		
	Mr	Jan	Janssens	LDK-JJC	Consultant, SWIM-H2020 SM non key expert	Vangvauseus2009@gmail.com	x	x	X
	Ms	Nada	Haddad	LDK/Apol8	Communication Specialist	nada@apol-8.com	x		
	Mr	Suzan	Taha	Swim-H2020	Key water expert	taha@swim-h2020.eu	x	x	X