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# Water and Environment Support

in the ENI Southern Neighbourhood region



## Activity n°: N-W-JO-1

### Elaboration of non-revenue water policy for Jordan Stakeholders' Consultation Workshop Report

Deliverable Number: T2.1

<i>Version</i>	<i>Document Title</i>	<i>Author</i>	<i>Review and Clearance</i>
v.1.0	<i>Stakeholders' Consultation Workshop Report</i>	<i>Ehab Quran Udo Kachel</i>	Suzan TAHA

## **WATER AND ENVIRONMENT SUPPORT IN THE ENI SOUTHERN NEIGHBOURHOOD REGION**

The "Water and Environment Support (WES) in the ENI Neighborhood South Region" project is a regional technical support project funded by the European Neighbourhood Instrument (ENI South). WES aims to protect the natural resources in the Mediterranean context and to improve the management of scarce water resources in the region. WES mainly aims to solve the problems linked to the pollution prevention and the rational use of water.

WES builds on previous similar regional projects funded by the European Union (Horizon 2020 CB/MEP, SWIM SM, SWIM-H2020 SM) and strives to create a supportive environment and increase capacity all stakeholders in the partner countries (PCs).

The WES Project Countries are Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Libya, Palestine, Syria and Tunisia. However, in order to ensure the coherence and effectiveness of EU funding or to promote regional cooperation, the eligibility of specific actions can be extended to neighboring countries in the Southern Neighborhood region.



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## ABBREVIATIONS

AFD	Agence Française de Développement
EIB	European Investment Bank
ENI	European Neighbourhood Instrument
EU	European Union
EUD	Delegation of the European Union to the Hashemite Kingdom of Jordan
GIS	Geographic Information System
GIZ	German Agency for International Cooperation
JICA	Japan International Cooperation Agency
KFW	Kreditanstalt für Wiederaufbau
MESC	Management Engineering Services Contract
MOPIC	Ministry of Planning and International Cooperation
MWI	Ministry of Water and Irrigation
NRW	Non-Revenue Water
PMD	Project Management Directorate
UPMU	Utility Performance Monitoring Unit
USAID	United States Agency for International Development
WAJ	Water Authority of Jordan
WB	World Bank
WES	Water and Environment Support
WGA	Water Governance Activity -USAID funded project-

## 1 BACKGROUND OF ACTIVITY

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As part of the water component of the EU funded 'Water and Environment Support (WES) project in the ENI Southern Neighbourhood region' project, an activity entitled "Elaboration of non-revenue water policy for Jordan" is currently under implementation in partnership with the Ministry of Water and Irrigation (MWI) and the Central Non-Revenue Water (NRW) Unit.

The overall objective of this activity is to support Jordan's water sector in its on-going efforts to reduce nonrevenue water, thus contributing to improved network efficiency, improved service provision and increased cost recovery.

The specific objectives are to assist the Jordanian Ministry of Water and Irrigation in the elaboration of a non-revenue water policy that builds on the real situation and lessons learnt from pilot projects and other works in Jordan, and sets clearly defined rules for the development and implementation of NRW reduction and control in the country in order to achieve the national goals for reduced and sustained NRW - consistent with the proposition of Jordan's national strategy for water

## 2 WORKSHOP OBJECTIVES

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The workshop aims to:

- Present an overview of the national activity in Jordan
- Present the findings and results of the NRW background policy report under task 1 and the proposed recommendations
- Agree on the main axes around which the policy document will be developed (possible main and cross cutting themes)
- Present to the partners the way forward and the requirements and resources from them and other project beneficiaries to ensure buy-in and active engagement in the policy development
- Agree on the revised timetable of the intervention

## 3 WORKSHOP RESULTS

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- The findings of the assessment, the proposed recommendations and the main and cross cutting themes of the planned policy document are presented to the stakeholders and discussed/verified during a half-day workshop.
- A dialogue between the various stakeholders is established
- The requirements and necessary resources from the partners and other project beneficiaries are agreed upon.
- The consultation mechanisms with the partners and other project beneficiaries to ensure buy-in and active engagement during the policy development phase is agreed upon.
- The work program is approved

## 4 PROFILE OF THE PARTICIPANTS

This workshop targeted the officials representing relevant institutions and personnel from the MWI, Water Authority of Jordan (WAJ), Project Management Directorate (PMD) and water utilities (such as managers responsible for: operation and maintenance (O&M), NRW, GIS department, customers department (metering, billing, etc.) monitoring department, etc.) and all other stakeholders relevant for the activity including donors active in the NRW reduction efforts in Jordan. Below is the list of the stakeholders:

- Ministry of Water and Irrigation
- Water Authority of Jordan (WAJ)
- The Project Management Directorate (PMD)
- The Water utilities (Miyahuna, Yarmouk Water Company and Aqaba Water Company)
- The main donors active in NRW projects (EU, USAID, KfW, EIB, JICA, GIZ, AFD, World Bank)
- Ministry of Planning and International Cooperation (MOPIC)

### Consultation Workshop Demographics

Most -44%- of the participants were ministry representatives -MWI, WAJ, Central NRW Division, UPMU, MOPIC-. Donors participating in the workshop -KfW, AFD, USAID, World Bank- represented 17% of the overall attendance, while 12% of the participants represented Local authorities -Yarmouk Water Company, Miyahuna, Aqaba Water- and 6% represented EUD's -Delegation of the European Union to the Hashemite Kingdom of Jordan-. The remaining 21% participants represented the USAID-funded Water Governance Activity (WGA), the USAID's Management Engineering Services Contract (MESOC) providing technical assistance to eligible Jordanian water entities to implement the Non-Revenue Water Reduction Project agreed between USAID and Jordan, WES & True vision team.

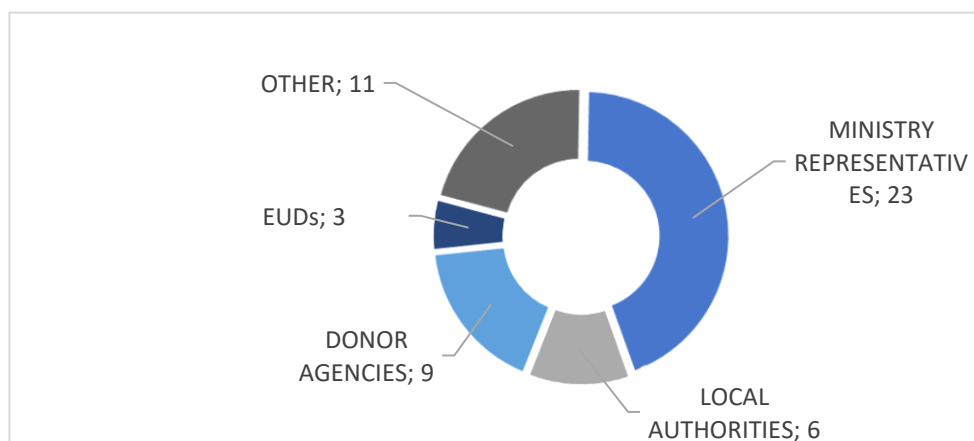


FIGURE 4-1: REPRESENTATION OF PARTICIPANTS PER TYPE OF INSTITUTION

## 5 STATISTICS GENDER AND YOUTH

An overall of 32 men and 20 women participated in this workshop. Other than the project's team, the workshop hosted 29 men and 16 women.



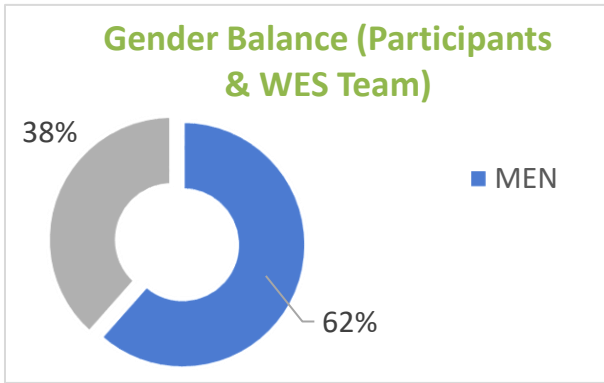


FIGURE 5-1: GENDER BALANCE (PARTICIPANTS & WES TEAM)

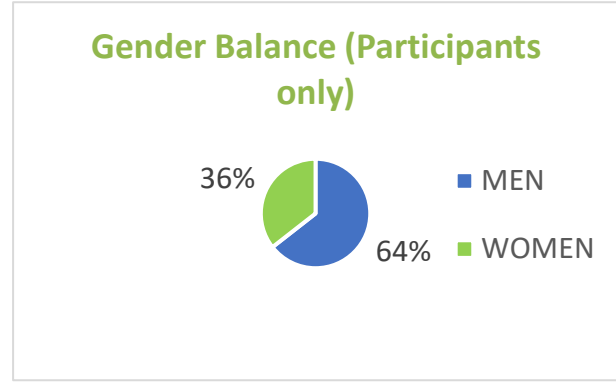


FIGURE 5-2: GENDER BALANCE (PARTICIPANTS ONLY)

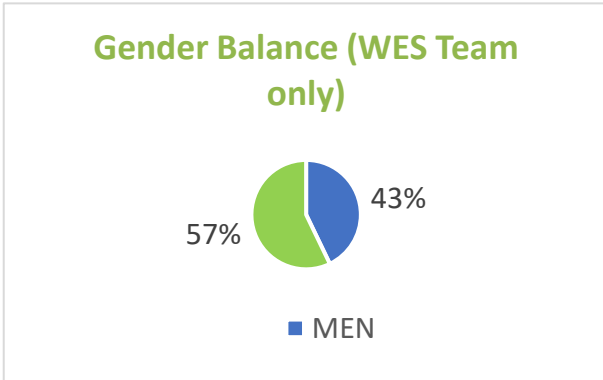


FIGURE 5-3: GENDER BALANCE (WES TEAM ONLY)

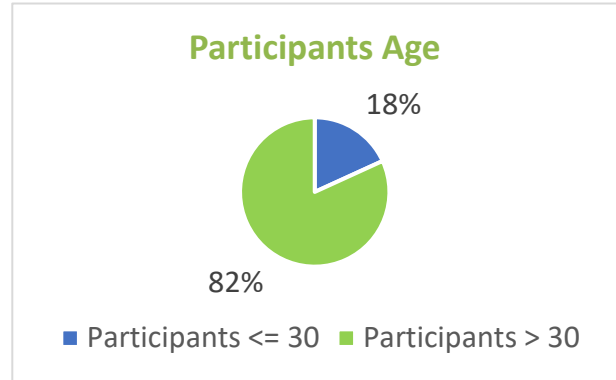


FIGURE 5-4: PARTICIPANTS AGE

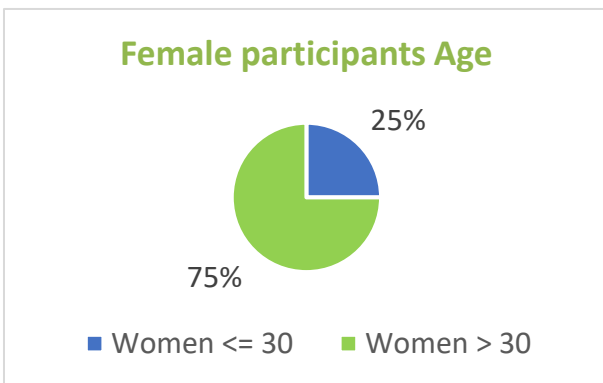


FIGURE 5-5: FEMALE PARTICIPANTS AGE

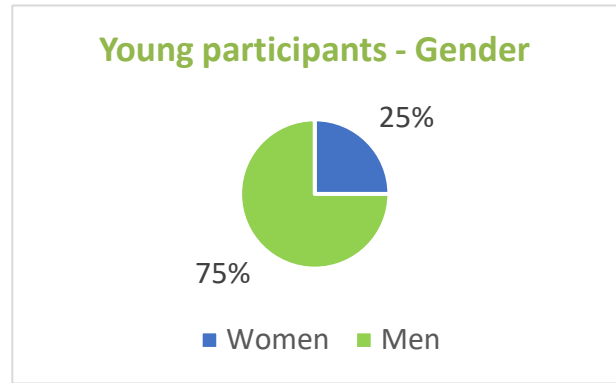


FIGURE 5-6: YOUNG PARTICIPANTS (18-30) - GENDER

Figures 5-1 to 5-6 show the gender balance and participants age relevant statistics.

## 6 EVALUATION OF THE EVENT

### 6.1 RESULTS OF THE EVENT

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

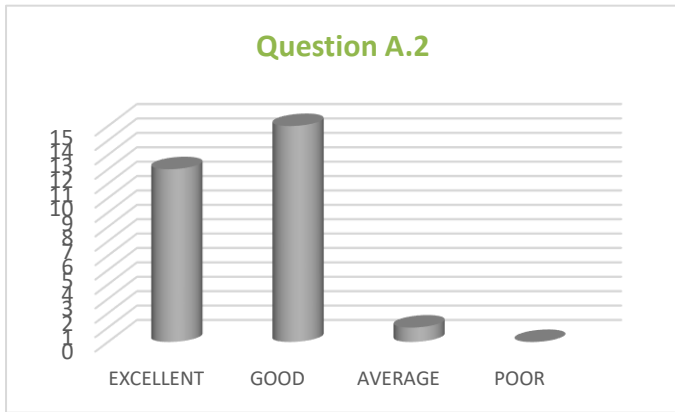
A set of 7 criteria; A1-A7 (See table below) were assessed by the participants, using a qualitative description ranging between “Excellent” to “Poor”.

Feedback from 28 participants (62% of all participants excluding WES & True Vision team) could be collected via online forms -Annex 8.3 Evaluation Form-. Table 6-1 shows a summary of the ratings provided by the participants.

**TABLE 6-1: PARTICIPANTS RATINGS (A. ORGANISATIONAL, ADMINISTRATIVE AND PLANNING ISSUES BEFORE AND DURING THE EVENT)**

A. ORGANISATIONAL, ADMINISTRATIVE AND PLANNING ISSUES BEFORE AND DURING THE EVENT		EXCELLENT	GOOD	AVERAGE	POOR	Total Replies	Average Score (max = 4)
<b>A1</b>	Efficient logistics: location of venue and interpretation (where applicable)	18	9	1	0	<b>28</b>	3.61
<b>A2</b>	Smooth flow of programme, efficient handling of emerging needs and attentiveness to participants concerns	12	15	1	0	<b>28</b>	3.39
<b>A3</b>	Planning of the workshop: efficient and effective communication of objectives	11	15	2	0	<b>28</b>	3.32
<b>A4</b>	Presentations correspond and contribute to the planned objectives and are conducive to enhanced shared understanding and participation on addressed topics	14	10	4	0	<b>28</b>	3.36
<b>A5</b>	Clarity, coverage and sufficiency of concepts, objectives, anticipated outputs	10	15	3	0	<b>28</b>	3.25
<b>A6</b>	Efficiency and effectiveness of the facilitation	15	10	3	0	<b>28</b>	3.43
<b>A7</b>	Overall rating of the event	11	15	2	0	<b>28</b>	3.32

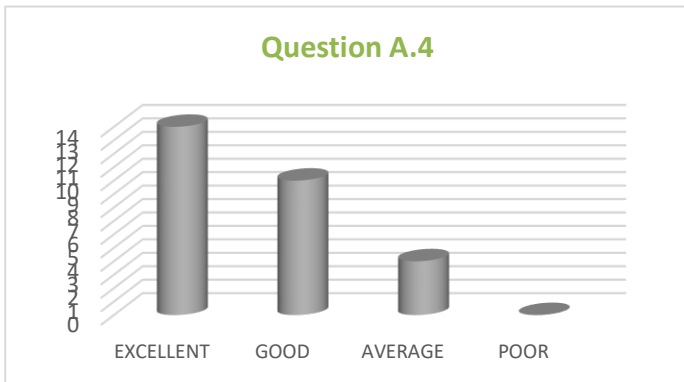
Figures 6.1 to 6-5 represent participants' feedback regarding each criterion.



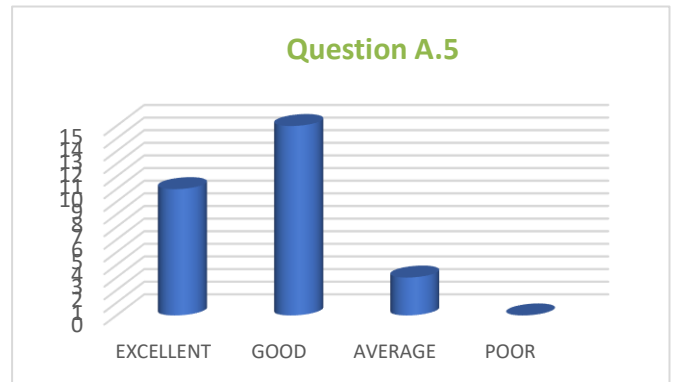
**FIGURE 6-1: FLOW OF PROGRAMME, HANDLING OF EMERGING NEEDS (A.2)**



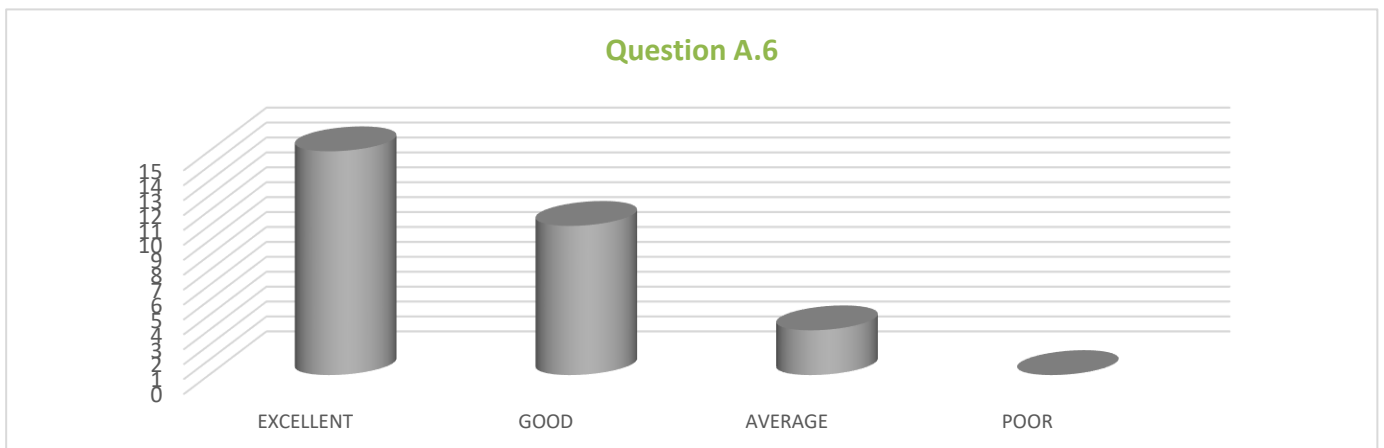
**FIGURE 6-2: PLANNING OF WORKSHOP: EFFICIENT AND EFFECTIVE COMMUNICATION OF OBJECTIVES (A.3)**



**FIGURE 6-3: EVALUATION OF PRESENTATIONS (A.4)**



**FIGURE 6-4: CLARITY, COVERAGE AND SUFFICIENCY OF CONCEPTS, OBJECTIVES, ANTICIPATED OUTPUTS (A.5)**



**FIGURE 6-5: EFFICIENCY AND EFFECTIVENESS OF THE FACILITATION (A.6)**

**B. Feedback by participants on technical aspects:**

Table 6-2 shows a summary of the ratings provided by the participants regarding the technical aspects

**TABLE 6-2: PARTICIPANTS FEEDBACK (B. TECHNICAL ASPECTS)**

<b>B. FEEDBACK ON TECHNICAL ASPECTS</b>		<b>No. of replies</b>
<b>B1</b>	<b>Coverage of the event</b> <b>In your opinion did the event cover (tick one of the following):</b>	
	All the topics necessary for a good comprehension of the subject nothing more	16
	Some topics covered are not necessary	5
	Some additional topics should be included	7
	No reply	0
	<b>Total Replies</b>	<b>28</b>
<b>B2</b>	<b>Efficient and effective performance and interaction with Experts hosting the consultation meeting</b> <b>(tick one of the following):</b>	
	Excellent	15
	Good	11
	Average	1
	Poor	0
	<b>Total Replies</b>	<b>27</b>
<b>B3</b>	<b>Length of the event</b> <b>In your view the workshop duration (tick one of the following):</b>	
	Longer than needed	3
	Sufficient	23
	Shorter than required	1
	No reply	1
	<b>Total Replies</b>	<b>28</b>
<b>B4</b>	<b>Acceptable level of achievement of planned objectives (tick one of the following):</b>	
	Excellent	10
	Good	16
	Average	2
	Poor	0
	<b>Total Replies</b>	<b>28</b>

Figures 6-6 to 6-9 represent participants' feedback regarding each criterion.



FIGURE 6-6: CONSULTATION WORKSHOP COVERAGE (B.1)



FIGURE 6-7: EFFICIENT AND EFFECTIVE PERFORMANCE AND INTERACTION WITH EXPERTS (B.2)

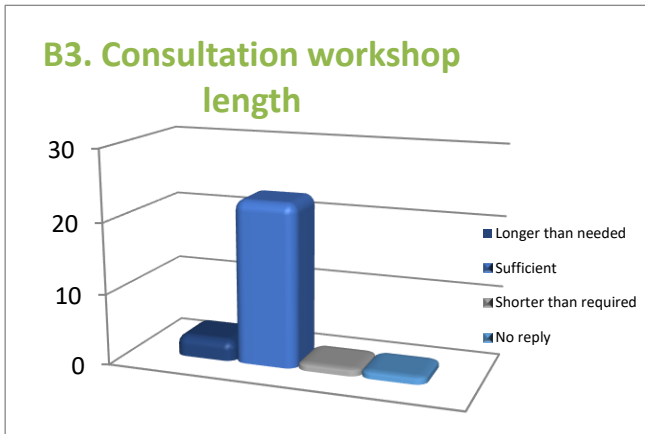


FIGURE 6-8: CONSULTATION WORKSHOP LENGTH (B.3)



FIGURE 6-9: LEVEL OF ACHIEVEMENT OF PLANNED OBJECTIVES (B.4)

The following table summarizes the most frequent statements made by the participants.

**TABLE 6-3: MOST FREQUENT STATEMENTS MADE BY THE PARTICIPANTS**

Summary of most frequent statements made by the participants	
<b>B5</b>	<b>What did you like most about this event?</b>
	<ul style="list-style-type: none"> <li>• Presentation, organization &amp; management of the workshop</li> <li>• Attendance of stakeholders and experts.</li> <li>• Knowledge exchange</li> </ul>
<b>B6</b>	<b>What needs to be improved?</b>
	<ul style="list-style-type: none"> <li>• Provide clear action/implementation plan</li> </ul>

**C. Feedback by the NKE on technical aspects:**

The analysis of the existing NRW management in MWI/ WAJ and the utility companies as presented in the background document and in the workshop was shared and confirmed by most participants. Many of them were showing a kind of frustration about the persistently high levels of NRW over the past 20 years.

Out of the discussions in the workshop, the institutional weakness and lack of professional expertise especially in the middle management levels of WAJ and the utility companies have been identified as major obstacles, endangering the sustainable reduction of NRW.

It was recommended by many participants that the NRW policy document should include adequate statements and guiding principles to complement the approved NRW strategy of the Ministry of Water and Irrigation with the objective to strengthen the institutional performance in NRW management.

It may be advisable to not only concentrate on the in-house policy adjustments but to mobilise and focus as well Technical Assistance and private sector engagement on the NRW management.

All participants agreed that the massive donor support on NRW reduction, providing more than one billion JOD on capital investment over the coming 6-10 years, must be accompanied by a strong institutional support and reinforcement of expertise on all levels.

The definition of NRW as a percentage of system volume input is misleading and should only be used as political figure only. Technically, other performance indicators as recommended by the International Water Association (IWA) should be used and introduced in the Jordanian NRW management.

It was apparent that NRW management is a highly complex undertaking, covering all business operations of the utility companies and requiring to include planning, design and construction of the water infrastructure.

There seems to be a mis-perception about the role of NRW units, being build up in MWI/ WAJ and the companies. Such units cannot reduce NRW by themselves, but shall support the regular business units in carrying out their tasks professionally and efficiently.



## 7 CONCLUSIONS & OVERALL ASSESSMENT

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The workshop was delivered as planned. The level of attendance was satisfactory -given the fact that the workshop was held few days ahead of Ramadan-.

Participants were active -in general- and got engaged in different dialogues that aimed to get the Stakeholders engaged in the process, propose recommendations, agree on the policy's main axes, and intervention timetable. Discussions notes -Annex 8.4- were taken to be reflected on the final policy's background document -whenever applicable-.

In general, the workshop was successful in terms of achieving its objectives and results -please check Sections 2 and 3-, with satisfactory feedback from the participants -please check Section 6-.

## 8 ANNEXES

### 8.1 AGENDA

09:30-10:00	<b>REGISTRATION</b>
10:00-10:15	<b>Welcome &amp; general introduction</b>
	<ul style="list-style-type: none"> <li>- <b>Welcome and Introductory notes</b> <i>Dr. Mohammad Dweiri – Assistant Secretary General for Planning Affairs, MWI</i> <i>Ms Laura VITULLO – Solid Waste Management, Water and Transport Programme Manager, Cooperation Section, Delegation of the European Union to Jordan</i> <i>Ms Suzan TAHA – Water Key Expert, WES</i></li> </ul>
10:15-11:35	<b>PRESENTATION OF THE MAIN FINDINGS AND RECOMMENDATIONS AND GENERAL DISCUSSION</b>
	<ul style="list-style-type: none"> <li>- <b>Introducing the WES activity in Jordan (5 min)</b> <i>Ms Suzan TAHA, Key Water Expert, WES</i></li> <li>- <b>Presentation of the NRW policy background document (45 min)</b> <i>Mr Udo KACHEL: Senior Expert in NRW management and Policy formulation - WES International expert</i> <i>Mr Ehab QURAN: Local NRW Expert, WES</i></li> <li>- <b>Discussion(30 min)</b> <i>Facilitated by Mr Udo KACHEL and Mr Ehab QURAN, WES</i></li> </ul>
11:35-11:50	<b>COFFEE BREAK</b>
11:50 – 12:40	<ul style="list-style-type: none"> <li>- <b>Presenting the Recommendations, main results, and cross cutting Axis of the NRW Policy Document (20 min)</b> <i>Mr Udo KACHEL, WES</i></li> <li>- <b>Discussion (30 min)</b> <i>All participants - Facilitated by Mr Udo KACHEL and Mr Ehab QURAN, WES</i></li> </ul>
12:40-13:10	<b>THE WAY FORWARD</b>
	<ul style="list-style-type: none"> <li>- <b>Presentation of the way forward and revised work plan (15 min)</b> <i>Mr Udo KACHEL, WES</i></li> <li>- <b>Feedback from the participants (15 min)</b> <i>All participants - Facilitated by Mr Udo KACHEL and Mr Ehab QURAN, WES</i></li> </ul>
13:10-13:30	<b>CLOSURE AND WORKSHOP EVALUATION</b>
	<i>Facilitated by: Ms Suzan TAHA, WES</i>
13:30-14:30	<b>LUNCH</b>



## 8.2 DISCUSSION/COMMENT (1/2)

**Q1.** [?]: What are the main factors that would have a direct effect on the NRW Reduction?

**A1.** [Udo, WES]: Mainly;

- a. Institutional weakness,
- b. Restrictions on technical/financial modifications/customizations of the NRW programmes in order for them to properly address the strategy,
- c. Empowering relevant institutions.

**C1.** [Raed Zuraikat, MESC]: Without having the proper Institutional capacity, the NRW reduction targets are simply unrealistic.

**C2.** [Ghazi Khalil, WGA]: Institutional capacity building should address other areas than the human capacity building, such as ERP systems.

**C3.** [Abdullah Jarrah, Miyahuna]: Other than networks high pressure -which is not a main technical issue facing Miyahuna O&M-; surge is the main technical issue -which accompanies intermittent supply scheme-.

**C4.** [Ghazi Khalil, WGA]: Based on his experience in Miyahuna, he noticed that Miyahuna used to have almost a constant number of daily leaks complaints – around 100 complaints/day- despite the fact that all known measures were implemented in this regard. This makes him believe that the piping materials quality/selection should be investigated and addressed properly, for example; PE installation conditions.

**Q2.** [Nisreen Haddad, KfW]: Can you please elaborate more on Policy vs Strategy?

**A2.** [Udo/Suzan, WES]: In general; policy can be seen as a guidance that translates a strategy into proper action plan/s. This topic will be covered thoroughly in the upcoming slides.

**C5.** [Dalal, WAJ]: There should be a list of qualified contractors whom are capable of performing proper installation and are in compliance with the relevant specifications.

**C6.** [Roger, Engicon]:

- a. There should be a systematic way to address illegal use,
- b. Water tariff should be revised and updated to ensure sustainable relevant investments,
- c. WAJ/Utilities should ensure setting proper maintenance budgets.

**C7.** [Ghazi Khalil, WGA]:

- a. Illegal use at primary & secondary networks has a huge impact -a considerable NRW component-,
- b. Proper reporting tools are needed to address the illegal use at tertiary networks,
- c. Utilities other than Miyahuna are using X7 -CIS- versions with humble capabilities.

**C8.** [Abdullah Jarrah, Miyahuna]: Miyahuna has initiated an incentive scheme to address NRW/Illegal use, where Jabis -meter readers- are entitled of receiving financial incentives for locating illegal use

cases. It's noted that the reported illegal use cases have been doubled since adopting this incentive scheme.

**C9.** [Roger, Engicon]: Utilities need to use their GIS -& other water- systems more efficiently.

**Q3.** [Louis Qaqish, USAID]: Where does the NRW Reduction Policy fit (Policy vs Strategy)?

**A3.** [Udo]: In general; policy can be seen as a guidance that translates a strategy into proper action plan/s. This topic will be covered thoroughly in the upcoming slides.

**C10.** [Louis Qaqish, USAID]: There is a need for the utilities to get more involved in drafting the NRW Reduction Policy.

**C11.** [Rajeesh, WB]: Utilities should be eligible of having proper incentives for the reduced NRW volumes -directly proportional with the reduction-. Incentives can be financed through appropriate funds. These incentives can be invested to improve Opex relevant activities.

**C11.** [?]:

- a. Quality of repairs should be investigated/improved,
- b. Problems associated with the network installations should be investigated,

**C11.** [Laura, WES]: Proper measure should be implemented to minimize the number of qualified/trained employees leaving their utilities.

**C12.** [Udo, WES]: There will be a coordination with the USAID since the NRW Policy is related to the Strategy -which has been developed through a USAID funded project-.

