

# SWIM and Horizon 2020 Support Mechanism

Working for a Sustainable Mediterranean, Caring for our Future

## REG-14: Refugee Emergency: Fast track project design on water, wastewater and solid waste (focusing on wastewater and solid waste),

Presented by:

Ms Suzan TAHA, Key water expert

Sustainable Water and Integrated Management & H2020 Support Mechanism (SWIM-H2020 SM)

WP3: Regional on-site Training - "Wastewater Treatment"

26-29 March 2018, Beirut, Lebanon

This Project is funded by the European Union



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# Project info

## COMPONENTS

Sustainable Water  
Integrated Management -  
Support Mechanism

Horizon 2020 -  
Support Mechanism

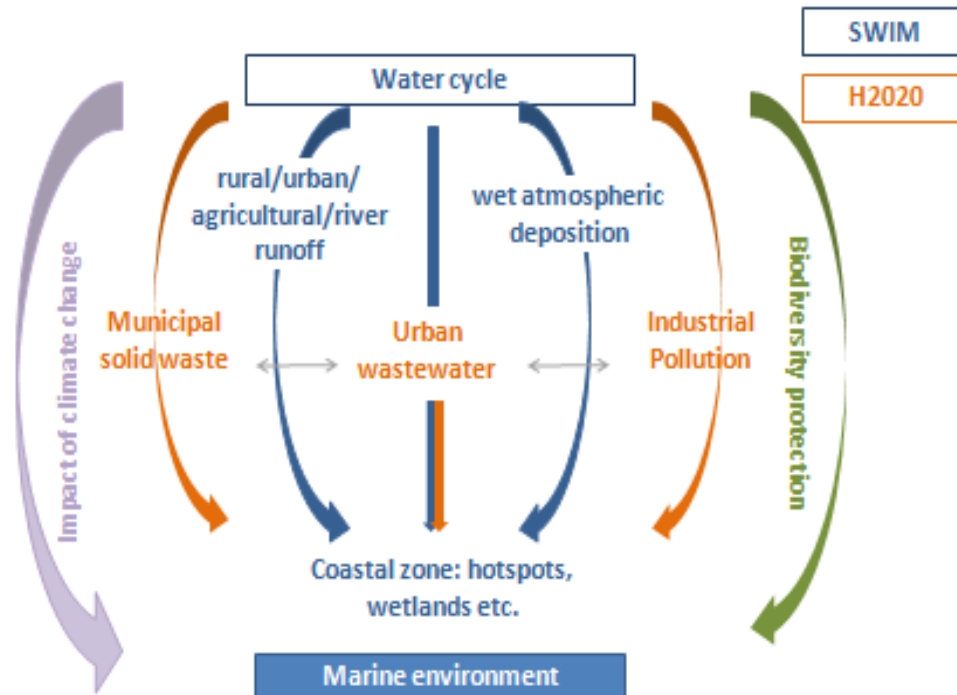
## OVERALL OBJECTIVE:

**“to contribute to reduced marine pollution and a more sustainable use of scarce water resources by providing tailored and targeted support to stakeholders of the Beneficiary Countries within each of the six result areas”**

# PROJECT BACKGROUND

Continuation and merging of two successful previous EU-funded projects:

- ☐ Horizon 2020 Capacity Building / Mediterranean Environment Programme (H2020 CB/MEP) (2009-2014)
- ☐ Sustainable Water Integrated Management (SWIM) (2010-2015)



# SWIM-H2020 SM

## The project aims to:

Provide tailor-made technical assistance at the national level in response to partner requests, provided through a pool of experts

Organize regional (or sub-regional) seminars and webinars between peers

Organize trainings and study visits in the field

Capitalize on lessons learned, good practices and successes

Provide support to the Horizon 2020 Governance Mechanism and the work of the Water expert group of the UFM

# EXPECTED RESULTS

## In order to obtain the following results:

Positive changes triggered in the design and implementation of the relevant national institutional, policy and regulatory frameworks;

Enhancement of partner countries' capacity to promote investment and business opportunities for properly managing municipal waste, industrial emissions and waste water;

Facilitation of access to finance for selected sustainable investment projects;

Strengthening of regional coherence and cooperation in approaches to marine pollution prevention and control, and sustainable water management;

Identification, testing and sharing of best practices and success stories;

Use of research results in policy making – enhancement of more sustainable practices.

# Identité du SWIM-H2020 SM

## Partner countries:

Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, [Syria], Tunisia  
Participation of Albania, Bosnia Herzegovina, Mauritania, Montenegro and Turkey in regional activities can be considered.

## Client:

The European Commission, DG NEAR1 (Neighborhood and Enlargement Negotiations)

## Team SWIM-H2020:

M. Stavros Damianidis, Project Director  
Prof. Michael Scoullou, Team Leader  
Ms. Suzan Taha, Water Expert  
Mr. Ismail Anis, Environment Expert

## Duration:

39 months (2016-2019)

## Budget:

6.625.000 Euros

# Consortium of SWIM-H2020 SM



**LDK Consultants S.A. (Chef de file)**  
**LDK Consultants Europe S.A.**



**Haskoning DHV Nederland B.V.**



**Arab Countries Water Utilities Association (ACWUA)**



**Bureau méditerranéen d'information sur l'environnement, la culture et le développement durable (MIO-ECSDE)**



**Réseau arabe pour l'environnement et le développement (RAED)**



**Milieu Ltd**



**Association des cités et régions pour le recyclage et la gestion durable des ressources (ACR+)**



**Université nationale et capodistrienne d'Athènes**



**Agence catalane de l'eau (institution hôte du Centre d'activités régionales pour la consommation et la production durables (SCP/RAC))**



**Umweltbundesamt GmbH**



**EEIG UT – SEMIDE**



**WS Atkins International Ltd**



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# OBJECTIVES OF THE WORKSHOP

## **Overall Objectives:**

Introduce the key stakeholders from Jordan, Lebanon, Palestine and Tunisia) who are involved in management and design of wastewater treatment facilities, to the relevant technical concepts and approach for the proper design of wastewater treatment facilities taking also in account the description and requirements for emergency sanitation facilities in response to the influx and displacement of refugees.

## **Specific objectives:**

- Build the capacity of the relevant staff in the four countries through the provision of in-depth tailored training in the design of wastewater treatment facilities. Consideration will be given to treatment solutions that can be adopted for temporary settlements and refugee camps.
- Examine long term solutions that can be adopted for permanent refugee camps or long term temporary settlements.
- Sharing of experiences within the sub-region in dealing with the influx of the refugees as it relates to organisational and financing issues.



# TARGET AUDIENCES

The Technical Staff responsible for the preparation of the technical components and the terms of reference and for reviewing the design of wastewater systems, as part of the design and construction of wastewater treatment plants management systems.

## LEARNING OUTCOMES

- In depth training in the design of wastewater treatment plants.
- Understanding the requirements for sanitation facilities and solutions that can be adopted for temporary settlements/camps as they would be for long term temporary settlements and/or permanent settlements.
- Understanding and comparison of the specific wastewater treatment standard for each partner country.
- Lessons learnt in wastewater treatment and solid waste management schemes / facilities under emergency, based on the accumulated hands-on experience as a result of dealing with temporary settlements related to refugees in the sub-region.

# TRAINING AGENDA – 1/2

Item	Time	Description	Speaker
<b>26 March:</b>			
1	09:00-09:10	Welcome Remarks	Suzan Taha
2	09:10-09:30	Pre training test	Mohammad Sutari
3	09:30-11:00	Wastewater Constituents, Chemistry, Characterization & Microorganisms	Mohammad Sutari
	11:00-11:20	Coffee Break	
4	11:20-13:00	Flow, Loads & Discharge Standards & Lessons Learnt Under Emergency	Mohammad Sutari
	13:00-14:00	Lunch Break	
5	14:00-15:00	Preliminary & Primary Treatment	Mohammad Sutari
6	15:00-16:30	Water & Sanitation Facilities for Refugee Camps Under Emergency	Mohammad Sutari
<b>27 March</b>			
7	09:00-11:00	Activated Sludge Process -Session 1	Mohammad Sutari
	11:00-11:20	Coffee Break	
8	11:20-13:00	Activated Sludge Process - Session 2	Mohammad Sutari
	13:00-14:00	Lunch Break	
9	14:00-15:00	Secondary Clarifiers	Mohammad Sutari
10	15:00-16:00	Chemicals Addition & Biological & Chemical Phosphorus Removal	Mohammad Sutari
<b>28 March</b>			
11	09:00-10:00	Aeration & Mixing Systems	Mohammad Sutari
12	10:00-11:00	Sludge Treatment and Possible Energy Generation	Mohammad Sutari
	11:00-11:20	Coffee Break	
13	11:20-12:20	Tertiary Treatment - Filtration & Disinfection	Mohammad Sutari
14	12:20-13:00	Configuration, Layout & Overview of Other Treatment Processes	Mohammad Sutari
	13:00-14:00	Lunch Break	
15	14:00-14:30	Example of Water & Sanitation Systems for Permanente Refugee Camps	Mohammad Sutari
16	14:30-16:00	Closing of Training and Post training test and assessment	Mohammad Sutari

# TRAINING AGENDA – 2/2

## 29 March: Plenary sessions

1	09:00-09:40	Jordan response to the Syrian Crisis: moving from crisis management to planned response: - Process/Procedures for the development of Jordan Response Plan (JRP) followed by Q&A	Ammar Abu-Drais, Solid Waste Consultant (Short term solutions - the case of Jordan); SWIM-H2020 SM
2	09:40-10:20	Lessons learned from the response to the Syrian Crisis (case of Lebanon). How humanitarian aid works - Presentation by the Economic and Social Fund for Development followed by Q&A	Dima Sader, Community Development and Infrastructure Manager, Economic and Social Fund for Development (Lebanon Office)
3	10:20-11:00	How humanitarian aid works and applying for funds - Presentation by Oxfam International - Q&A	Prasad Bhagwan Sevekari - Oxfam International Regional WASH Advisor – MENA (Jordan office)
	11:00-11:30	Coffee Break	
4	11:30--12:00	Municipal peer to peer learning: how best practices in solid waste and wastewater management can be replicated through on the job coaching between municipalities - Presentation by ACTED followed by Q&A	Ciara Noon: WASH Technical Coordinator for ACTED (Lebanon)
5	12:00-12:30	Solid Waste Management plans of the Greater Amman Municipality / The impact of the Syrian crisis - Presentation by GAM followed by Q&A	Omar Arabiyat: Manager of Env. Studies and Planning Department Greater Amman Municipality (GAM)
#6	12:30-13:00	Guidelines for waste management in refugee camps Case study in Lebanon - Presentation by Arcenciel followed by Q&AQ&A	Mario Goraieb, Environment Program, Arcenciel
	12:30-13:30	Lunch	

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Thank you for your attention

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