



Assessment of marine litter in the Egyptian Mediterranean coastline (EFH-EG-3)

National workshop,

19-20 September, Alexandria

1 INTRODUCTION: THE SWIM-H2020 SM

The SWIM and H2020 SM is a Regional Technical Support Program, funded by the European Commission, Directorate General (DG) NEAR (Neighborhood and Enlargement Negotiations), 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.

2 BACKGROUND

Marine litter -any persistent, manufactured or processed solid material discarded, disposed of or abandoned in the marine and coastal environment- is globally acknowledged as a major societal



challenge of our times due to its significant environmental, economic, social, political and cultural implications. Marine litter negatively impacts coastal and marine ecosystems and the services they provide, ultimately affecting people's livelihoods and well-being.

Marine litter related information in the Mediterranean, remains limited, inconsistent and fragmented, however it is widely accepted that it is one of the most affected seas by marine litter worldwide. Effective measures to tackle marine litter in the region are seriously hampered by the lack of reliable scientific data. Within this context the need for accurate, coherent and comparable scientific data on marine litter in the Mediterranean countries is evident in order to set priorities for action and address marine litter effectively, thus ensuring the sustainable management and use of the marine and coastal environment of the region.

Within the framework of the SWIM-H2020 SM Egypt has asked for an Expert Facility Activity (EFH-EG-3) in order to assess marine litter in the Egyptian Mediterranean coastline and come up with targeted management options. This activity will support the implementation in Egypt of the obligations and measures relevant to the Regional Plan for Marine Litter Management in the Mediterranean of the Barcelona Convention and will contribute to Integrated Coastal Zone Management (ICZM) within the framework of the implementation of the regional ICZM Protocol of the Barcelona Convention. More specifically, the action will support Egypt in: integrating marine litter measures into the LBS National Action Plan in line with Article 7 of the Regional Plan; assessing marine litter in the Egyptian Mediterranean coastline in line with Article 11 of the Regional Plan; designing a marine litter monitoring programme in line with Article 12 of the Regional Plan; supporting the implementation of Regional Plan through technical assistance and capacity building in line with Article 15 of the Regional Plan.

The assessment of marine litter in the Egyptian Mediterranean coastline and the proposed management options based on the results would trigger positive changes in the design and implementation of the relevant national institutional, policy and regulatory frameworks, which should incorporate marine litter prevention and reduction measures. Furthermore, it will strengthen the regional coherence and cooperation in approaches to marine pollution prevention and control, and sustainable waste management. The areas addressed/covered by the proposed activity include a study/assessment, technical assistance and capacity building.

The overall Activity entails the following tasks:

- Task 1: Carry out marine litter pilot surveys (including a workshop) on the Med Coast of Egypt along with a literature review focusing on strengthening the evidence base concerning marine litter and in particular plastics.
- Task 2: Compile a document with 'best' available techniques and methodologies for monitoring marine litter in the coastal and marine environment and short listing of best environmental practices for management of marine litter.
- Task 3: Carry out a literature review on the degradation process for plastics.
- Task 4: Review the socioeconomic implications of marine litter.

This workshop is carried out under Task 1. Together with the Egyptian Authorities (via the Horizon 2020 Focal Point) within this task, specific sampling sites for the marine litter monitoring on the Mediterranean coast will be selected, a core set of professionals will be trained on how to properly monitor marine litter



on coasts and 3-4 marine litter monitoring surveys will be conducted. Once the task is completed marine litter datasets from the pilot monitoring surveys will be obtained; an assessment report will be elaborated on amounts, types, composition and sources of marine litter.

3 OBJECTIVES

The overarching goal of the workshop is to train a core set of professionals to properly monitor marine litter on coasts. The workshop participants will be briefly introduced to the theme of marine litter, its sources and impacts, as well as the main legislative framework to combat marine litter, namely the Barcelona Convention Regional Plan for Marine Litter Management in the Mediterranean. The participants will gain an overview of the 'best' available techniques and methodologies for monitoring marine litter in the coastal and marine environment. Most importantly, they will have the opportunity to get acquainted step-by-step with the methodology for monitoring marine macro-litter on beaches and gain hands-on experience on how to perform beach litter surveys. The participants will survey two transects on the coastline of Alexandria and process the respective data in order to obtain a snapshot of the marine litter density in the area and the potential main sources. Throughout the workshop emphasis will be given to the practical implementation of the three marine litter indicators adopted within the Barcelona Convention Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast and Related Assessment Criteria (IMAP – Decision IG.22/7).

- Common Indicator 22: Trends in the amount of litter washed ashore and/or deposited on coastlines (EO10);
- Common Indicator 23: Trends in the amount of litter in the water column including micro plastics and on the seafloor (EO10)
- Candidate Indicator 24: Trends in the amount of litter ingested by or entangling marine organisms focusing on selected mammals, marine birds, and marine turtles (EO10).

4 APPROACH

The workshop will comprise of a balanced mix of presentations, small group simulation exercises, a field visit and moderated discussion to foster an engaging learning experience. It is also intended to be participatory and interactive. The workshop will be facilitated by on-line video guidelines (<http://mio-ecsde.org/project/mio-ecsdedefishgear-guidelines-on-how-to-monitor-marine-litter-on-beaches/>) and an e-learning platform (http://www.envirolearning.net/index.php?ctg=lesson_info&courses_ID=26) on marine litter monitoring. At the end of the workshop the participants will be provided with the training materials and other marine litter related resources so as to enhance their competences on how to design and carry out marine litter monitoring. These resources will include the metadata templates and monitoring protocols and the steps forward towards the development of a Marine Litter Reporting system within the Barcelona Convention framework.



5 EXPECTED OUTCOMES

The expected out outcomes of the workshop are:

- Enhanced understanding of key issues (technical, environmental, economic, health, cultural and social) related to marine litter;
- Deepened knowledge on the Barcelona Convention Regional Plan for Marine Litter Management in the Mediterranean Acquiring and the the three marine litter indicators adopted within the Barcelona Convention Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast and Related Assessment Criteria (IMAP – Decision IG.22/7);
- Improved knowledge and understanding of appropriate marine litter monitoring schemes and methodologies;
- Strengthened capacities to monitor marine litter on beaches in a harmonized way and also enhanced skills to process the marine litter datasets and identify the marine litter sources.
- Strengthened implementation of the Barcelona Convention Regional Plan for Marine Litter Management in the Mediterranean

The outcomes of this workshop will be instrumental in selecting sampling sites for marine litter monitoring on the Egyptian Mediterranean coast and in conducting the pilot marine litter monitoring surveys.

6 TARGET GROUP

The ideal target group of this workshop includes the following stakeholders:

- The H2020 Focal Point;
- The UNEP/MAP MEDPOL Focal Point;
- Members of staff of the EEAA/Ministry of Environment and/or any other relevant agency that would be involved in designing the marine litter monitoring programme of Egypt as well as the marine litter measures;
- Representatives of local authorities in charge of keeping the beaches clean and/or managing waste and/or involved in designing/implementing the waste management plan of the Governorate;
- NGOs carrying out beach litter surveys or interested in performing marine litter monitoring
- Research institutes and academia working or interested in working on the issue of marine litter monitoring;
- Representatives of any related marine litter monitoring related projects
- Management bodies of coastal and/or marine protected areas;
- Any other stakeholder (e.g. plastic producers associations, fishermen associations, etc.) interested in marine litter monitoring and marine litter management.



7 LOCATION AND DATES

Mediterranean Azur Hotel, Alexandria, 19-20 September 2017. Field visit nearby (by bus).

8 WHAT TO BRING TO THE FIELD VISIT

- Trekking shoes with appropriate socks
- Small backpack for taking personal items (Sun block cream, hat, sun glasses)
- Camera and binoculars (if you have them)
- Bottle for water (thermos or other refillable bottle recommended)
- Long-sleeved pants and long-sleeve shirts
- Pen and notepad and/or tablet

9 TRAINING AGENDA

19 September 2017 (Interpretation English-Arabic)

Time	Session	Work programme	Speaker(s)
09.30-10.00	Welcome	Welcoming remarks Agenda overview Ice breaker	Ms. Heba Sharawy, H2020 Focal Point, EEAA/Ministry of Environment Dr. Emad Adly, SMIM-H2020 SM stakeholder engagement expert Dr. Thomais Vlachogianni, SWIM-H2020 SM/ MIO-ECSDE marine litter expert
10.00-11.00	Introduction	<ul style="list-style-type: none"> • Brief overview of the SWIM-H2020 SM • The H2020 Initiative for a Cleaner Mediterranean: achievements in Egypt during phase II • MEDPOL activities on marine litter in the Mediterranean • Marine litter activities in Egypt • Introduction to the Expert Facility Activity 'Assessment of marine litter in the Egyptian Mediterranean coastline and proposed management options' 	Dr. Emad Adly, SMIM-H2020 SM stakeholder engagement expert Ms. Heba Sharawy, H2020 Focal Point, EEAA/Ministry of Environment Dr. Mouhor Ibrahim, UNEP/MAP MEDPOL Focal Point Dr. Sameh Riad, Project Focal Point on marine litter Dr. Thomais Vlachogianni, SWIM-H2020 SM/MIO-ECSDE marine litter expert
11.00-11.30	Coffee break		



11.30-13.00	Monitoring marine litter	Overview of 'best' available techniques and methodologies for monitoring marine litter in the coastal and marine environment	Dr. Thomais Vlachogianni, SWIM-H2020 SM/MIO-ECSDE marine litter expert
13.00-14.00	Lunch break		
14.00-15.30	Monitoring and assessment of marine litter on beaches	Methodology for monitoring marine litter on beaches and assessing marine litter amounts, composition and sources	Dr. Thomais Vlachogianni, SWIM-H2020 SM/MIO-ECSDE marine litter expert
15.30-16.00	Coffee break		
16.00-17.00	Monitoring and assessment of marine litter on beaches (continued)	Introduction to the field work on beach litter surveys	Dr. Thomais Vlachogianni, SWIM-H2020 SM/MIO-ECSDE marine litter expert
17.00-17.30	Wrap up	Reflections & concluding remarks	All

20 September 2017

Time	Session	Work programme	Speaker(s)
09.00-09.15	Welcome	Brief introduction to the field work	Dr. Thomais Vlachogianni, SWIM-H2020 SM/MIO-ECSDE marine litter expert
09.15-13.00	Monitoring marine litter on beaches	Field surveys in group work	Dr. Thomais Vlachogianni, SWIM-H2020 SM/MIO-ECSDE marine litter expert Mr. Essam Nada, SWIM-H2020 SM, solid waste expert
13.00-14.00	Lunch break		
14.00-15.30	Monitoring marine litter on beaches (continued)	Results analysis/simulation exercise from field work in group work	Dr. Thomais Vlachogianni, SWIM-H2020 SM/MIO-ECSDE marine litter expert Mr. Essam Nada, SWIM-H2020 SM, solid waste expert
15.30-16.00	Wrap up and closure	Reflections & concluding remarks, certificates, evaluation	All

**The civil society component of SWIM-H2020 SM is facilitated by
the UfM labelled BlueGreen project and network**