

Egyptian National Marine Litter Pilot Projects

“ Fishing for litter *FfL* and Adopt a Beach *AaB* ”

Terms of Reference (ToR)

1-Introduction

Marine Litter (ML) consists of items that have been deliberately discarded, unintentionally lost, or transported by winds, into the sea and on beaches. It is mainly consists of plastics, wood, metals, glass, rubber, clothing and paper. Land-based sources account for up to 80% of marine litter – these include tourism, sewage and illegal or poorly managed landfills. The main sea-based sources are shipping and fishing. ML has been acknowledged as an emerging threat with significant implications for the marine and coastal environment. Its impacts are environmental, economic, health and safety. At the Mediterranean level, ML has been an issue of concern since the 1970s. The ML problem is exacerbated by the basin’s limited exchanges with other oceans, its densely populated coasts, highly developed tourism, 30% of the world’s maritime traffic passing through and various additional inputs of litter from urbanized areas.

Egypt as member of Barcelona Convention Contracting Parties is trying to control ML impacts on the marine environment. In this context, a small scale funding agreement (SSFA) has been signed between the Egyptian Environmental Affairs Agency (EEAA) representing Egypt, and the United Nation Environmental Programme represented by its coordination unit for the Mediterranean Action Plan (UNEP/MAP). One of the main objectives of this agreement is to support Egypt implementing two pilot projects as a part of the Egyptian ML management plan. The two pilots are fishing for litter *FfL*, and Adopt a Beach *AaB*.

Fishing for Litter in the Mediterranean” is one of the measures that have the potential to reduce the amounts of marine litter at the sea . Also, the implementation of *AaB* pilots is expected to provide EEAA with clear understanding of the current status of beach ML that would be studied in line with IMAP and NAP indicators in close coordination with the respective national monitoring programme on marine litter.

2-Background Information

I-Sea floor Litter

For selecting the appropriate beaches and sites for the Egyptian marine litter pilots, three days fieldtrip have been implemented. This quick survey trip covered most of the Egyptian Mediterranean coastal line in collaboration with the local authorities in the different locations. Among the visited locations, two different sites were selected for the Fishing for litter *FfL* pilot as follows:

- ❑ Eastern harbor fishing port in Alexandria governorate.
- ❑ Port Said fishing port in Port Said governorate

The selections were based on the MED-POL criteria, taking into consideration the surrounding anthropogenic activities (fishing, tourism, etc).

Eastern Harbor

The Eastern Harbor had considered the main water basin and port of Alexandria since the Romans times. Its distinct shape, location, geological features and historical background gives the harbor its important status. The Eastern Harbor is located to the west of Alexandria Mediterranean coast at the city center. It is characterized by semi-closed rounded shape with 2.6 km long from west to east, 1.4 km long from south to north, and covers an area of 2.8 km². The water depths reach a maximum of 11 m at the harbor outlet (El-Boughaz) along the western margin of the "El-Silsila" breakwater, but nearly half of the harbor floor lies at depths of 5 m or less.

Port Said Fishing Port

In a residential area, the port is located on the west bank of Suez Canal near the northern entrance. It consists of 4 U shaped docks with a Total Area of 90508.5 m². The total vessels capacity is 402 fishing vessels with a berth depth of 9m.

II- Beach litter

According to the three days fieldtrip previously mentioned, three beaches have been selected and proposed for the "Adopt a Beach *AaB*" pilot project. The selection was based on the MED-POL criteria as follows:

- El-Obaied Beach in Matrouh ; it is a long recreational public beach located in Marsa Matrouh city . It represents a touristic destination located at the western part of the Egyptian Mediterranean coast and famous for its white sand.
- October beach in Alexandria; it represents the western part of the coast with a long recreational sandy beach. The beach is located near the tourists destinations with a length of more than 100 m, and characterized by its 1.5-2.0 m moderate slope.
- Port Said beach; it represents the eastern part of the Egyptian coastal areas and located (relatively) in the vicinity of the river mouth. It is characterized by its sandy beach with a length of more than 100 m and a clear access to the sea. The site is also located near Port Said fishing port.

3- Objectives and Focus

This consultancy assignment is to Provide technical support and on ground implementation of the *FfL* and *AaB* pilots in the selected areas in Egypt. The main objectives are:

- An in-depth understanding of the current status of the marine litter problem in the selected sites.
- An in-depth understanding of the different prevention measures, reduction, removal and sustainable management of marine litter, as well as their corresponding implications based on the two pilots output.

This consultancy assignment also should focus on the following topics:

- ❑ Draft work plan and monitoring plan for the implementation of the *FfL* and *AaB* pilots; in consultation with the EEAA representatives.
- ❑ Draft training material and guidelines, to facilitate the implementation of the *FfL* and *AaB* pilot projects in Egypt.
- ❑ Organize, prepare and implement the missions to the selected/pilot areas previously mentioned to conduct on the ground the implementation of the *FfL* and *AaB* pilots in Egypt.
- ❑ Draft progress reports on the implementation of the *FfL* and *AaB* pilots, best practices and lessons learnt.
- ❑ Provide input to update the already existing UN Environment/MAP IMAP and *FfL* guidelines, as well as elements based on the experience gained from the implementation of the pilots, to be used for the development of “Adopt-a-beach” guidelines at regional level.
- ❑ Propose and execute environmentally sound ways suitable for the removal and disposal of the collected marine litter items, propose and take measures to preserve the coastal environment and protect the corresponding fauna and flora.
- ❑ Propose and marine litter reception and management in harbors/ports as appropriate.
- ❑ Ensure safety while surveying the beach sites.

4- Scope of Activities and tasks

- ❑ Develop training material to guide the Implementation of the “Fishing-for-Litter” and “Adopt-a-Beach” pilots based on the UN Environment/MAP Fishing for Litter Guidelines (Decision IG.22/10), the UN Environment/MAP IMAP Guidance document (IG.22/Inf.7), also on existing best practices, and adjust them to Egypt’s needs as appropriate to ensure that the pilots are implemented under common standards together with those pilots implemented to the beneficiary to the Marine Litter MED project.
- ❑ Preparation and Implementation of monitoring program and data analysis for *FfL* pilots at Port Said fishing port and Alexandria eastern harbor. The methodology of implementation could be combined between the collaboration with the fishermen communities, Egyptian Sea Scout club, and the local scientific institutions. The number of seafloor litter items will be collected sorted and analyzed in reference to the total area of the proposed study sites and the total weight of the sorted items. The work should follow the latest MEDPOL Metadata template and seafloor monitoring guidelines for seafloor litter (annex 1). Also the sea floor litters collected accidentally by fishermen during their regular trawling should also be analyzed as mentioned before.
- ❑ Enhance national and local capacity on the fishing for litter measures with a focus to improve the reception and waste disposal of the collected marine litter from the fishermen in the fishing shelters/ports at national level.
- ❑ Organize awareness raising and national capacity building workshop at national level and undertake awareness raising activities with Fishermen and local authorities, to ensure active involvement of

fishermen, citizens, universities, NGOs and local authorities (100 participants for 2 days). Location and event agenda is to be decided in consultation with the EEA representatives.

- ❑ Preparation and Implementation of monitoring program and data analysis for the three selected beaches. ML items will be collected sorted and analyzed in reference to the total area of the proposed study sites and the total weight of the sorted items. The work should follow the latest MEDPOL Metadata template for beach Marine Litter.
- ❑ Organizing awareness raising local campaigns on the issue of ML found stranded on beaches and its impact on marine and coastal environment (Target groups: NGOs, schools, youth communities, other relevant stake holders).
- ❑ Implement clean up activity for each of the three beaches selected for *AaB* pilots. Clean up activities should be carried out taking into account safety rules of the engaged communities and in cooperation with the local authorities for effective and proper disposal of the collected marine litter. Moreover, information on Total Weight and Weight/Main Types (i.e. plastic, rubber, cloth, paper/cardboard, processed/worked wood, metal, glass, ceramics, sanitary waste, medical waste, etc.) along with the length of the beach or the transect of the beach that was cleaned-up should also be reported.
- ❑ Give detailed future plan for ML management in Egypt including mitigation measures and recommendations to be implemented based on the pilots outputs

5- Deliverables

- ❑ Detailed work plan, including work plan for each pilot project separately (*FfL* and *AaB*) at national level, including all corresponding aspects.
- ❑ Training material and guidance for the implementation of the “Fishing-for-Litter” and “Adopt-a-beach” pilot projects, at national level.
- ❑ Communication and dissemination plan.
- ❑ Assessment report on the results from the implementation of the “Fishing-for-Litter” pilot projects, including data collection and assessment in the two selected pilot areas.
- ❑ Assessment reports on the results from the implementation of the “Adopt-a-beach” pilot projects, including data collection and assessment in the three pilot areas.
- ❑ Report on lessons learnt from the implementation of the *AaB* pilot projects and propose elements for the development of common “Adopt-a-beach” guidelines, and their contribution to relevant existing best practices.
- ❑ Mission Reports.
- ❑ Draft reports (interim, mid-term, final) on the implementation progress of the *FfL* and *AaB* pilots in Egypt including: background information, methodological approach, results, best practices,

problems occurred lessons learnt , gained experience, data and metadata forms; Elements and proposals for updating the UN Environment/MAP FfL and AaB guidelines should be included.

- The final report has to be submitted in Arabic and English and should include mitigation measures and recommendations to be implemented based on the pilots outputs

6- Qualifications of the Consultant

The following tasks and experience is required for this consultancy:

- Minimum of 10 years of experience in Marine sciences is preferred (M.Sc. or Ph.D. in a related field is also preferred)
- Good command of English language
- Ability to travel to the selected governorate to conduct the projects activities
- Ability to coordinate between different stakeholders
- Documented related experience would be an assist
- CVs of his/her assistant team should also be submitted

7- Financial provisions and timeframe

The time frame of the two pilot projects is envisioned with duration of 12 months starting one week after signing the contract.

The consultant shall include in the offer the total budget of the work, including detailed expenses for travelling/ accommodation and the maximum number of visits.

The budget shall also include travelling/accommodation for two representatives of EEAA in each filed trip to the study sites and pilots activities.

The contractor shall include in his financial offer a breakdown of fees and expenses, which relate to the completion of each separate activity inclusive of all taxes and social charges.

Payment schedule to the consultant shall be as follows:

- 30% Advance Payment upon signing the contract
- 20% Interim Payment after submission of the missions progress reports
- 20% Upon submission of all deliverables; completion of the whole pilots
- 30% Last Payment after the final report accepted and approved by EEAA and UNEP-MAP

8- Methodology

The whole work should be done under the latest MED-POL Metadata Templates for beach Marine Litter monitoring and fishing for litter guidelines (Annex 1, 2). Attached annexes should be considered as a part of the consultancy assignment.

9- Publishing rights & Ownership of the data

Ownership of the publishing rights for the whole work shall rest with the EEAA. The collected data should be treated in a secure way and not to be shared or used for any purpose.

10 - Communications

For any inquiries or questions regarding the pilots, the consultant shall only contact the EEAA representatives and not to contact the UNEP/MAP directly.

11- Annexes:

FfL

http://wedocs.unep.org/bitstream/handle/20.500.11822/6072/16ig2_2_28_22_10_eng.pdf?sequence=1

AaB

unep.org AaB working document

12- How to Apply

For applying, please submit the following documents:

- Updated CV showing the relevant experience.
- Work plan and technical offer (taking into consideration the output listed under section 7 above)
- Financial offer in Egyptian pounds

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