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Third Meeting of the Regional Cooperation Platform on Marine Litter in the Mediterranean

Izmir, Turkey, 11-12 October 2018

**Agenda item 5: Progress Achieved in the Implementation of the 2018 Joint Work Plan**

**Progress Report on the Implementation of the 2018 Joint Work Plan Related Activities**

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## Table of Contents

|                                                                                                                                                                                                                               |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Introduction .....                                                                                                                                                                                                            | 1  |
| a. Mapping of processes, initiatives and mandates to allow higher effectiveness and better coordination of the collective responses to marine litter challenges .....                                                         | 2  |
| b. Harmonization and standardization of monitoring and assessment methodologies .....                                                                                                                                         | 5  |
| c. Contribution to and promote effective waste management schemes and use of prevention tools, taking of related socio-economic aspects .....                                                                                 | 9  |
| d. Assessment and prevention of marine litter impacts on biodiversity, especially in Marine Protected Areas (MPAs) .....                                                                                                      | 11 |
| e. Assessment of socio-economic impacts of marine litter, including microplastics, highlighting impacts of marine litter and microplastics on human livelihood (i.e. shellfish, fisheries, fish farming, tourism, etc.) ..... | 14 |
| f. Promotion of education, awareness-raising and capacity building .....                                                                                                                                                      | 14 |
| Annex I: Regional Cooperation Platform on Marine Litter 2018 Joint Work Plan                                                                                                                                                  |    |

## Introduction

1. The UN Environment/Mediterranean Action Plan (MAP) was the first Regional Sea Programme to adopt a legally-binding Regional Plan on Marine Litter Management ([Decision IG.21/7, COP18, Istanbul, Turkey](#)) in December 2013; hereafter referred to as the Regional Plan. It provides for a set of programmes of measures and implementation timetables to prevent and reduce the adverse effects of marine litter on the marine and coastal environments, as well as for regular marine litter monitoring and assessments including socio-economic aspects. It also promotes intersectoral collaboration at different levels and involvement of relevant regional organizations and civil society; in particular, Articles 17 and 18 of the Regional Plan which address “Major Groups and Stakeholder Participation” and “Regional and International Cooperation.” For the effective implementation of the Regional Plan, appropriate involvement of various stakeholders including local authorities, civil society, private sector (producers, garbage collection and treatment companies, etc.) and other stakeholders as appropriate (Regional, National and Local Authorities; Maritime sector; Tourism sector; Fisheries and Aquaculture; Agriculture, etc.), should be encouraged. In addition, institutional cooperation should be established with various relevant regional and global institutions and initiatives.

2. To this extent, at the invitation of the UN Environment/Mediterranean Action Plan (MAP), on 6 September 2016, the Regional Cooperation Platform on Marine Litter in the Mediterranean was established. The principal task of the Platform is to provide coordinated support and guidance to the implementation of the Regional Plan on Marine Litter Management in the Mediterranean. As such, it acts as a forum for consultation, exchange of good practices, and solutions seeking.

3. The Regional Cooperation Platform on Marine Litter in the Mediterranean is implemented through the establishment, on a voluntary basis, of an open-ended group<sup>1</sup> of regional and international partners with mandates and activities contributing to the environmentally sound management of marine litter in the Mediterranean. The cooperation platform offers to its members the opportunity to provide, on an equal footing and as appropriate, concrete contributions and inputs for the implementation of the Regional Plan based on their individual mandates, expertise, work plans, and the decisions and recommendations of their respective governing bodies.

4. The second meeting of the Regional Cooperation Platform on Marine Litter in the Mediterranean was held in Barcelona, Spain on 9-10 November 2017, in the framework of the Marine Litter Week (6-10 November 2017) organized by the UN Environment/MAP and its Sustainable Consumption and Production Regional Activity Center (SCP/RAC), during which the priority themes for a joint 2018 work plan were agreed. The priority themes of common interest and related activities upon which a 2018 Joint Work Plan was built upon, are listed hereunder and are also provided in full details under Annex I to the present report.

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<sup>1</sup> Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS); Deutsche Gesellschaft Für Internationale Zusammenarbeit (GIZ) GMBH; Euro-Mediterranean Center on Climate Change (CMCC); European Commission Joint Research Centrum (EC JRC) Technical Group on Marine Litter (TGML); European Environment Agency (EEA); General Fisheries Commission for the Mediterranean (GFCM); GRID-Arendal, Institut Français de Recherche pour l'Exploitation de la Mer (IFREMER); Hellenic Marine Environment Protection Association (HELMPEA); Institute for water of the Republic of Slovenia (IWRS); International Bottom Trawl Survey in the Mediterranean (MEDITS); International Union for Conservation of Nature Centre for the Mediterranean Cooperation (IUCN-MED); Mediterranean Association to Save the Sea Turtles (MEDASSET); Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE); Mediterranean Science Commission (CIESM); National Research Council of Italy (CNR); PANACeA project (Streamlining Networking and Management efforts in Mediterranean Protected Areas for Enhanced Natural Conservation and Protection); Plastics Europe; Prince Albert II Monaco Foundation; Secretariat for the Union for the Mediterranean (UfM); Surfrider Foundation Europe; Sustainable Development Solutions Network for the Mediterranean (SDSN-MED); Sweep-NET; UN Environment/Global Programme of Action for the Protection of the Marine Environment from Land-based Activity (GPA); UN Environment/Mediterranean Action Plan (MAP) (including MED POL) supported by the relevant Regional Activity Centres (SPA/RAC, SCP/RAC and REMPEC); Waste Free Oceans (WFO)

5. The third meeting of the Regional Cooperation Platform on Marine Litter will offer the opportunity to discuss and review the status of implementation of the 2018 joint work plan; update and prepare the 2019 joint workplan; and most importantly, for first time, to interact several MEDPOL focal points.

6. The present report summarizes the progress reported to the Secretariat in the implementation of the joint 2018 work plan by the individual members of the Regional Cooperation Platform on Marine Litter in the Mediterranean with regards to:

- a. Mapping of processes, initiatives and mandates to allow higher effectiveness and better coordination of the collective responses to marine litter challenges;
- b. Harmonization and standardization of monitoring and assessment methodologies;
- c. Contribution to and promote effective waste management schemes and use of prevention tools, taking of related socio-economic aspects;
- d. Assessment and prevention of marine litter impacts on biodiversity, especially in Marine Protected Areas (MPAs);
- e. Assessment of socio-economic impacts of marine litter, including microplastics, highlighting impacts of marine litter and microplastics on human livelihood; and
- f. Promotion of education, awareness-raising and capacity building.

**a. Mapping of processes, initiatives and mandates to allow higher effectiveness and better coordination of the collective responses to marine litter challenges**

7. [ACCOBAMS](#) received from Italy a voluntary contribution to support the implementation of activities on marine litter and, in particular, to develop collaboration with the MEDPOL programme of the UN Environment/MAP for the implementation of pilot projects in the Adriatic.

8. [MEDASSET](#) submitted a project proposal in the framework of the call for “Sustainable Blue Economy” by [EASME-EMFF](#) (Strand 2: Marine Litter). The project titled MARINNOVA (Mapping, Removal and Recycling of Marine Litter using Innovative Technology in Mediterranean Coastal Communities) was submitted by four partners from three countries (Greece, the Netherlands and Montenegro). The project’s objectives are related to mapping, collection and re/upcycling of ALDFG, through an innovative re/up-cycling technology (3D printing) and capacity building of local stakeholders, as well as the development of a Circular Economy Business Scheme (CEBS).

9. [The Mediterranean Information Office for Environment, Culture and Sustainable Development \(MIO-ECSDE\)](#), within the framework of the EU funded SWIM-H2020 SM project, has carried out a thorough screening and mapping of marine litter related projects implemented in the Mediterranean funded by the EU-financed Research and Innovation Framework Programmes (FP7 and Horizon H2020/Research) and other relevant sources such as the EU Eco-Innovation programme, LIFE+, ENPI-CBC MED, INTERREG MED and IPA Adriatic. A list of 114 marine litter-related projects has been compiled.

10. [PANACeA](#), the Interreg Med Biodiversity Protection Community led by the Horizontal project has created a working group on biodiversity protection and management with a strong component on marine litter as related to biodiversity. This WG of PANACeA is a collaboration between ETC-UMA, Medcities, and UN Environment/MAP’s Plan Bleu which is providing support in coordinating and building on the achievements of several projects working on marine litter, namely [Act4Litter](#), [MedSeaLitter](#), [PlasticBusters MPA](#), [BlueIslands](#), [AMAre](#) and [Pharos4MPAs](#). The working group has an action plan with various activities organized (e.g. webinar, workshops) and several documents are under preparation for release up to the end of 2019 on impacts and pressures, including a working group factsheet, with highlights on aspects related to marine protected areas. [ETC-UMA](#), the lead partner of PANACeA, is also sharing with members of the Platform its [common calendar of events](#). Discussions are now under way for organizing a back to back event with MARLICE 2019 next

April 2019 in Seville, taking the opportunity of the presence of various regional organizations dealing with marine litter.

11. [PANACeA](#) is leading the Interreg Med Biodiversity Protection Community that is mapping the results of the biodiversity protection community of projects. This includes the marine litter projects results on pressures and impacts on biodiversity with a special focus on protected areas, and the promotion of common protocols for monitoring macro and micro litter at various levels. The marine litter database and spatial information will be open to the public and made available through an online portal giving access to the public of information related to Interreg Med projects. The portal will serve at the same time as a repository of research findings and Interreg Med actions currently under implementation. These data will be complemented with other sources available from outside the community such as the data collected under the Med-IAMER initiative and others.

12. [Surfidiers Foundation Europe](#) organized a marine litter workshop in the framework of the [Blue Ecoforum](#) meeting in Barcelona, Spain (24 November 2017). During the meeting, the “[Barcelona Declaration](#)” was signed by several organizations in which the following provision was proposed: “*To improve Mediterranean countries cooperation: Marine Litter as a common issue. Taking into account the urgent call for preventing and reducing Marine Litter in the Mediterranean Basin, cooperation between all Barcelona Convention countries is required to enhance synergies and maximize the results. In this framework, the following actions have been proposed:*

- *To boost coordination between countries particularly on programmes and projects under EU and Non-EU funding systems dedicated to Marine Litter studies to avoid overlapping and duplication of efforts enhancing collaboration and communication of actions done; by means of regular meetings -annual or biannual- of project managers related to Marine Litter Projects in Mediterranean Basin.*
- *To improve transboundary cooperation by means of high-quality funding systems focusing on Marine Litter including funding support to reduce of inequality in situ between Northern and Southern Mediterranean countries in terms of research and infrastructures, especially by focusing on the 2nd phase of this EU funding period until 2020 and above all for next funding periods 2021-2027.*
- *To make available all information on Marine Litter in a common and public database (open data) both on realized projects and scientific articles related with in the Mediterranean Basin; bring them together and keep under an institutional umbrella such as UNEP/MAP by 2025.”*

13. Marine litter is mentioned among the key priorities of the [Union for the Mediterranean \(UfM\)](#) Task Force on Environment, held in January 2018 in Jordan, working towards the definition of the post 2020 UfM agenda and work programme on environment to be endorsed by a Ministerial Declaration tentatively scheduled in late 2019/2020. The points of relevance to marine litter (linkage to plastics and waste management) as agreed by the countries include the following:

- Further enhance actions to support the transition towards a Circular Economy, including on plastics, with special attention to marine litter, as priority issues;
- Ensure continuity and enhancement of pollution reduction and prevention and Sustainable Consumption and Production (SCP) actions under a potential H2030 initiative, building on achievements of the H2020, in line with the SDGs, and in close cooperation with the Barcelona Convention;
- Continue and enhance the Capacity Building-related activities building on the achievements of SWIM-H2020 Support Mechanism;
- Further efforts for the implementation of the Mediterranean Strategy for Education for Sustainable Development; and
- Continuing supporting the switch towards sustainable consumption and production.

14. [UN Environment/MAP](#) with the MED POL Programme and the other MAP components have implemented an ambitious number of activities aiming at supporting the Contracting Parties' efforts for the implementation of the Regional Plan. The Regional Plan has played an important role as an instrument for the definition and execution of measures that will significantly impact the situation of marine litter in the Mediterranean region. This important body of activities deriving directly from the Regional Plan includes efforts taken with resources mobilized with several donors; most importantly the European Commission. Of major importance are the marine litter related activities in the framework of the cooperation agreement between UN Environment and the Italian Ministry for Environment, Land and Sea (IMELS). These activities have been complemented also by the wider work undertaken by the Secretariat in the context of other initiatives relevant to marine litter, at the regional and global level, including the plastic industry (PlasticsEurope and the [2018 PolyTalk](#), St. Julian's, Malta, 26-29 April, 2018) and the research sector ([SETAC Europe 28<sup>th</sup> Annual Meeting](#), Rome, Italy, 13-17 May 2018), which provide a multi-faceted and coherent response by the MAP system that coalesces around the Regional Plan itself. UN Environment/MAP also hosted the fifth Coordination Meeting between the European Regional Seas (Vrachati, Greece, 4-5 July 2018), during which the progress in the implementation of the Regional/Action Plans was reviewed. The meeting in Vrachati also offered the opportunity to the European Regional Seas to develop, at the initiative of the UN Environment/MAP, and review a concept note for the organization of a follow-up workshop to the G7 Workshop<sup>2</sup> on Marine Litter successfully organized in Rome, Italy in April 2017.

15. UN Environment/MAP established in the past few years a very strong cooperation link with the Commission on the Protection of the Black Sea Against Pollution (BSC). An agreement was also established with the BSC to support implementation of a number of activities regarding the development of a Monitoring Programme, and an Action Plan on Marine Litter for the Black Sea Region, as well as to strengthen bilateral cooperation between the two Secretariats. The Action Plan and the Monitoring Programme on Marine Litter for the Black Sea region are expected to be discussed by the Black Sea countries during the 34<sup>th</sup> Ordinary Meeting of the Black Sea Commission (24-25 Oct. 2018).

16. A number of marine litter-related activities are also designed, currently implemented or projected in the framework of the 2016 Memorandum of Understanding (MoU) between UN Environment and the Italian Ministry of Environment Land and Sea (IMELS), which includes a specific marine litter component related to the enhancement of marine litter management. All envisaged activities are presented in the MAP Programme of Work (PoW) 2018-2019 which include:

- Enhancement of coordination at Regional Seas level supported with the view to further contributing to the G7 agenda on marine litter, including: (i) Mapping of processes, initiatives, and mandates to set common goals and ensure better coordination of the collective responses to marine litter; (ii) Harmonization and standardization of methodologies in particular for monitoring and assessment and reporting; and (iii) Communication of activities to enhance awareness raising and involvement of stakeholders, and to promote partnerships, including with the private sector;
- Conducting a socioeconomic analysis on marine litter key best practices to prevent/reduce single use of plastic bags and bottles prepared, including an overall analysis for the whole Mediterranean basin, with a specific focus on pilot areas;
- Identifying and sharing marine litter best practices with the Contracting Parties; enhancement of technical capacities of the Contracting Parties to facilitate the implementation of key legally binding measures under the Regional Plan on Marine Litter Management in the Mediterranean, and other Measures;
- Sharing best practices on No-Special-Fee systems, organizing and preparing draft guidance document and guidelines to: i) Determine the application of charges at reasonable costs for the use of port reception facilities or, when applicable, application of No-Special-Fee system; and

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<sup>2</sup> [“The way forward - the relevance of the regional dimension in the implementation of the G7 Action Plan on Marine Litter”](#)

ii) Develop provisions of reception facilities in ports and the delivery of ship-generated wastes;”

- Meeting the marine litter reduction targets, as agreed during COP 19, in the pilot areas and preparing an assessment report;
- Developing and testing a pilot project on marine litter, aiming to create a digital system, supported by a platform and a smartphone application, for classification, geo-localization, continuous updating and dynamic exchange of marine litter data, detected at national and/or regional levels. The System will be flexible and easily extensible with further data categories useful to support the implementation of Smart Indicators for the ICZM;
- Organizing sub-regional meetings on the application of developed tools for identifying and assessing marine litter hotspots;
- Reviewing the most promising measures to minimize marine litter generation in MPAs and for selecting best practices considering the ecosystem services. In addition, preparing a governance plan on principal measures to minimize generation of marine litter that are common to all Med MPAs, and an action plan on the most promising measures to reduce marine litter in 10 MPAs; and
- Organizing a regional technical workshop on marine litter for the Mediterranean countries to develop a common understanding aimed to fill the gaps raised from the 2017 MED QSR and considering the work carried out by the Technical Group on Marine Litter (EU MSFD) on the implementation of the revised GES Decision 2017/848/EU.

#### **b. Harmonization and standardization of monitoring and assessment methodologies**

17. [ACCOBAMS](#) is working towards a standard protocol to collect data on ingested marine litter during cetaceans' necropsy. A joint ACCOBAMS/ASCOBANS/SPA-RAC workshop on marine litter and cetacean stranding was organized in La Spezia, Italy (8 April 2018), during the 31<sup>st</sup> European Cetacean Society Conference (ECS). The workshop aimed at assessing the impacts of marine debris on cetaceans and at initiating the development of a standardized protocol to collect data on ingested litter during necropsy of stranded cetaceans. A “draft protocol for relevant data gathering and sharing related to the targeted debris” has been presented during the workshop and an updated version will be presented to the next Meeting of the ACCOBAMS Scientific Committee (Monaco, 5-8 November 2018). A bibliographic review assessing the impacts of marine litter ingested by cetaceans has been prepared as a background document for this workshop. The report recommends the development and dissemination of standard post mortem protocols and further research to identify hot spots. Visual sightings of marine litter were collected during the “ACCOBAMS Survey Initiative” campaign. During the intense observation efforts deployed in the Mediterranean in the 2018 summer campaign, visual data on marine litter were collected by the different teams of observers.

18. [ACCOBAMS](#) also collaborates with IWC (International Whaling Commission), ASCOBANS (CMS Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas) and ECS (European Cetacean Society) to develop a joint necropsy protocol that would include a protocol for analysing ingested marine litter from cetaceans and to promote a similar methodology among the different stranding networks. Within this framework, ACCOBAMS, ASCOBANS, IWC and ECS have planned to organize a joint dedicated workshop during the 2<sup>nd</sup> World Marine Mammal Science Conference to be held in Barcelona in December 2019.

19. The [Euro-Mediterranean Center on Climate Change \(CMCC\)](#), in the framework of the [AMAre project](#) has conducted a comparative analysis among six selected Mediterranean MPAs to identify similarities and site-specific differences related to the coastline fluxes and rating the sources of plastics. Calculation of coastline fluxes and solving the inverse problems are carried out by using an output from a recently developed [2D Lagrangian model for the Mediterranean Sea](#)<sup>3</sup>. In particular, the following MPA sites were included in the study:

- National Park of ses Salines d'Eivissa i Formentera (the Balearic Islands);
- Nature Reserve of Bouches de Bonifacio (the Bonifacio Strait);
- Special Area of Conservation of Zona fil-bahar fil-Grigal ta' Malta or North-East Malta MPA (Malta);
- Specially Protected Area of Porto Cesareo (the Taranto Gulf);
- Site of Community Importance of Torre Guaceto (the Southern Adriatic); and
- Ethniko Thalassio Parko Alonnisou Voreion Sporadon (the Sporades islands).

20. Results obtained will help to understand the influence of plastic pollution on each the MPA's resources, and to develop site-specific management practices of marine litter. Due to the key role of shipping in pollution of plastics, some provisions of the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) should be reconsidered and reinforced. The conclusion about the relatively low plastic pollution of the studied MPAs might change dramatically in case of litter mismanagement within MPAs.

21. [The French Research Institute for Marine Research and Exploitation of the Sea \(IFREMER\)](#), is working in cooperation with various INTERREG projects (AMARE: IFREMER is leading the task on marine litter; Plastic Buster) to develop guidelines and recommendations for monitoring marine litter in MPAs. This includes the application or further testing of new methods (Drones, wavegliders, etc.), establishments of new protocols and recommendations on the most relevant strategies to assess Marine litter in MPAs. A relevant report will be published in 2019. It will also consider the work implemented by IFREMER; the French National Museum of Natural History; ISPRA (Italy) on descriptor 10DC4 (entanglement/smothering of benthic fauna with marine debris), including the development of protocols (SPA/RAC, MNHN/France and IFREMER). The testing of the protocols is planned in 2018 with a dedicated cruise in September 2018 and in 2019.

22. IFREMER is also a partner of the European Marine Observation and Data Network (EMODnet) which aims to develop and to collect, standardize and share marine litter and other environmental data. The aim is to provide reliable information to set targets and baselines for policy decisions. EMODnet Chemistry has a specific focus on beach litter, seafloor litter collected by fish trawl surveys and micro litter (micro plastics). Three specific approaches have been proposed, using the best available reference documents to develop a tailor-made approach on a European scale. Central databases were developed by EMODNET to gather and further process data at EU scale and possibly beyond (the Mediterranean Sea) for beach litter, seafloor litter and microlitter (microplastics). To harmonize the structures, data input and reference lists used, beach litter data has been collected in interaction with JRC (data collected from EU Member States to develop marine litter baselines, 2012-2016). Requests for data have also been sent to EEA and DeFishGear and their integration is planned. In the Mediterranean, Seabed litter data is planned to be collected through MEDITS and DeFishGear projects. The proposed approach for microlitter is to adopt and adapt SeaDataNet infrastructure and data formats discussed at TG ML annual meeting, with consideration to the feedback from various institutions (TG ML members, JPI Ocean – BASEMAN, etc.). Quality assurance and quality control (QA/QC) within EMODNET occurs through and MSFD board of experts. An online workshop on marine litter is planned during the fourth quarter of 2018 (tbc).

23. MEDASSET is participating in the [MedSeaLitter project](#) which aims at defining standard protocols for delivering international data capable of identifying types, sources and concentration areas of marine litter and risky areas for biodiversity. The first drafts of the protocols are already available and have been circulated among different networks for dissemination and testing. MEDASSET is participating in the testing of those protocols aiming to create four final sub-protocols that will be used for monitoring: macrolitter at large scale, macro-litter at MPAs scale, micro-litter at large scale and micro-litter at MPAs scale. One working package of the project aims in disseminating those protocols to the MPA managers after their finalization.

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<sup>3</sup> Liubartseva et al., 2018. *Mar Pollution Bull*, Vol.129(1), pp. 151-162

24. [MIO-ECSDE](#) has been promoting the implementation of harmonized beach litter surveys within its annual work programme and the frameworks of the Interreg Med ACT4LITTER and the EU funded SWIM-H2020 SM Project. It held three open-access webinars on how to monitor marine litter on beaches via a standardized methodology. It coordinated three editions of the [Marine LitterWatch \(MLW\)](#) month (winter, autumn, summer), carried out in some 20 coastal and marine protected areas located in Albania, Croatia, France, Greece, Italy, Slovenia, Spain and Turkey. Within the SWIM-H2020 SM Project, beach litter surveys have been carried out in Algeria, Egypt and Morocco. Last but not least, MIO-ECSDE in collaboration with the Interreg Med Plastic Busters project has led the development of a report on the state-of-the-art methods to monitor marine litter (macro-litter and micro-litter) in all marine compartments (beach, sea surface, seafloor, biota) and its impacts on biodiversity. This report aims to take-stock of the marine litter monitoring methodologies applied in the Mediterranean region and to establish a common understanding on the recent advances made with regards to marine litter monitoring in order to select the most mature, relevant and applicable protocols towards defining and testing a harmonized marine litter monitoring approach in Med MPAs. MIO-ECSDE within its annual work programme has launched an initiative for collection of beach litter data in a harmonized and standardized way in seven Member States in collaboration with Mediterranean environmental NGOs.

25. The [National Research Council of Italy \(CNR\)](#), through its [Institute for Polymers Composites and Biomaterials](#) is working on gathering experimental knowledge and understanding on the washing processes of synthetic clothes considered as one of the major sources of microplastic pollution. Starting from data already collected at lab scale during the LIFE13 ENV/IT/001069 Mermaids project, CNR-IPCB have carried out a set of experimental tests to quantify the amount of fibrous microplastics released during the washing of synthetic clothes in a real household washing machine. Tests were performed on synthetic garments with different textile characteristics in order to identify parameters that could influence the release. Repeating washing cycles were also performed on the same garments to evaluate the release of microplastics with time. The data collected from this research activity provided a better understanding of the real impact of microplastics released by synthetic fabrics during washing. Moreover, the experimental procedure developed to quantify the amount of microplastics coming from a washing machine, proved to be a reliable method to use as a starting point to develop a standardized procedure to monitor and assess the release.

26. The Mediterranean hub of the [Sustainable Development Solutions Network \(SDSN\)](#), hosted by the [University of Siena \(Italy\)](#), is working in the framework of various projects at national and international levels to establish guidelines and recommendations for monitoring marine litter in Mediterranean sea including its MPAs. In particular, the following activities are currently ongoing:

- a. UNISI with the support of the Italian Ministry for Environment Land and Sea (IMELS) contributes to assessment of the impacts of marine litter and microplastics, and to identification of hotspots where marine litter is accumulating, especially in MPAs in the Mediterranean and in Specially Protected Areas of Mediterranean Importance (SPAMIs), such as the Pelagos Sanctuary. Moreover, the impacts on endangered species living in hotspot areas is under evaluation.
- b. Studies have been published on the impact of microplastics and plastic additives, on endangered species (baleen whales, sea turtles, filter feeders sharks) and on the Mediterranean biodiversity. In addition, a new harmonised methodological approach for the assessment of the marine debris impact on Mediterranean biodiversity will be developed in cooperation with the Plastic Busters Network. Assessment in bioindicator species of harm caused by marine litter ingestion using a threefold approach will be conducted. The simultaneous measure of the presence and effects (accumulation of plastic associated contaminants and biomarker responses) can describe the harm and the sub-lethal effects on organisms related to marine litter ingestion.

27. The Marine Strategy Framework Directive (MSFD) [Technical Group on Marine Litter \(TGML\)](#) is planning to update the guidance documents in 2019 with updated and new protocols, including new tools, updated list of categories, and protocol on entanglement, etc. Close collaboration

with UN Environment/MAP is important to ensure compatibility, avoid duplication, and ensure compatibility between the MSFD TGML and the UN Environment/MAP MEDPOL protocols and related guidelines. In addition, the following progress has been made:

- For floating litter: activities and projects have been identified (2016 Barcelona Workshop, 6<sup>th</sup> International Marine Debris Conference, MEDSEALITTER, SCOR, etc.), collaborations are ongoing, a joint workshop between MSFD TGML and MedSeaLitter project will be organized (third quarter 2018/first quarter 2019, tbc) and the drafting of the protocol has been planned.
- For microplastics: A position paper was agreed during the TGML annual meeting in Larnaca, Cyprus (June 2018). TGML chairs/JPI Oceans project will lead the overall drafting process. The structure of the position paper has been agreed aiming to provide the scientific and technical background in order to support and enhance the implementation of monitoring activities related to microplastics.
- For sea floor litter: Limitations of seafloor litter monitoring by trawling and potential of image-based approaches were discussed during an international workshop, organized by the European Commission's (EC) Joint Research Centrum (JRC) and the Alfred Wegener Institute for Polar and Marine Research (AWI) on May 2018, focusing on the data needed and the technicalities of monitoring in different compartments.
- For harm: Additional information is already available on ingestion and related protocols (through the projects: INDICIT, CleanAtlantic, JPI Oceans, ICES protocols on fish) and entanglement (RAC/SPA, MNHN/France and IFREMER). Although promising, protocols on fish are considered not mature enough for regular monitoring. A workshop will be organized in Corsica (November 2018) on monitoring of ingestion/entanglement of/by marine litter in the Mediterranean Sea
- For riverine litter: apart from the increased attention for riverine litter and various projects (i.e. WFD, international conferences/workshops, research projects, NGOs, projects PLASTREND and Midas), the JRC RIMMEL project is developing and testing approaches for macrolitter monitoring in rivers (through river surface observation). A smartphone application has been developed by JRC to support monitoring with data already collected from 15 countries by scientific experts, also providing first evaluations on litter fluxes in two Mediterranean rivers (i.e. Llobregat in Barcelona, Rhone River in France). A top item list for riverine input was produced with a TOP 20 list representing 97% of all items. Further developments include image-based approaches and quality assurance and control (QA/QC).

28. [UN Environment/MAP](#): with regard to monitoring and assessment, and following the development of the IMAP Guidance Factsheets for marine litter-related indicators, UN Environment/MAP developed metadata reporting templates aiming to facilitate marine litter monitoring and reporting. Metadata for beach and seafloor marine litter have been developed and related Data Standards and Data Dictionaries have been also prepared within the ongoing process for development of IMAP Pilot Info System. These will be submitted to the CORMON on Pollution and Marine Litter (March 2019) with the view of their finalization and integration into IMAP Pilot Info System. Several Contracting Parties are implementing monitoring programmes for marine litter based on IMAP. In this respect several capacity building workshops have been organized in the framework of ECAP MED II, Marine Litter MED and SEIS projects by MED POL in cooperation with the Countries to support the preparation of national monitoring programmes. Work is also ongoing for development of national facts sheets for marine litter indicators under IMAP and the H2020/ NAP-related indicators.

29. The latest assessment product of the UN Environment/MAP is the [2017 Mediterranean Quality Status Report](#) (2017 MED QSR). The 2017 MED QSR is an important and innovative development for assessing the status of the Mediterranean ecosystem and the achievement of GES. The 2017 MED QSR includes two dedicated chapters on marine litter (EO 10) under the [Land and Sea-based Pollution](#) core theme. The marine litter-related chapter is dedicated to [IMAP Common Indicator 22](#) (i.e. Beach marine litter) and to [IMAP Common Indicator 23](#) (i.e. Seafloor and floating marine litter including microplastics). In addition, a number of [national case studies on marine litter](#)

from around the Mediterranean are supplementing the main marine litter chapters in order to provide a more comprehensive insight about the status of marine litter in the Mediterranean. Despite the challenges met and given the limited availability of data and the fact that the IMAP implementation is still at an early phase, the 2017 MED QSR brings together national data and information to the regional level. It also contributes to the ongoing work at the global level, including the Regional Process on a Second World Ocean Assessment and the implementation of the 2030 Agenda for Sustainable Development, focusing especially on the ocean-related Sustainable Development Goals. The 2017 MED QSR will serve as the baseline for defining the measures for progressing towards GES in the Mediterranean and for sharpening the monitoring programmes needed to fill the existing gaps.

30. The draft versions and main elements of the aforementioned guidelines will be presented during the Regional Meeting on Marine Litter Best Practices (Izmir, Turkey, 9-10 Oct. 2018), while the final versions will be presented into the second regional meeting of this series of events, in April 2019 in Seville, Spain.

31. Two regional meetings/workshops have been already organized in 2017 and in 2018 to maximize synergies with work on marine litter indicators under H2020 Initiative and its Review and Monitoring Component. The first ENI SEIS II South Support Mechanism Regional workshop on indicators (Copenhagen, Denmark, 17-18 May 2017) addressed the needed refinement of the Horizon 2020 review mechanism to take into account other assessment processes and further develop the current H2020 set of indicators (including marine litter) to reflect the renewed scope of the H2020 priorities applicable to all Mediterranean countries, in coherence with other existing indicators sets e.g. MEDPOL/NAPs indicators, MSSD, SDGs. The second ENI SEIS South Support Mechanism Regional Meeting on Indicators (Athens, Greece, 17-18 April 2018), welcomed more than forty participants from eighteen Mediterranean countries (Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, Greece, Israel, Italy, Jordan, Libya, Malta, Montenegro, Morocco, Palestine, Slovenia, Tunisia and Turkey), during which the current progress on H2020 indicator development and related assessment including marine litter were discussed, and general elements factsheets of H2020 marine litter indicators were agreed. During the 2018 meeting, the proposed indicators' methodological specifications and reporting processes were reviewed, including regional infrastructures. A final list of H2020/NAP indicators was agreed on wastewater, industrial emissions and solid waste including marine litter and their methodological specifications. Negotiations are ongoing to conclude the three marine litter-related H2020/ NAP reduction indicators that will complement those already set in the IMAP.

### **c. Contribution to and promote effective waste management schemes and use of prevention tools, taking of related socio-economic aspects**

32. The German Agency for International Cooperation ([Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH – GIZ](#)) implements since June 2018 a regional project on “Developing capacities for preventing marine litter” in southeastern Europe on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ). It envisages to improve the capacities of local and national players in the waste and recycling economy to reduce waste inputs to the Adriatic. On-going waste management projects in Algeria, Morocco and Egypt contribute to waste reduction, reuse and recycling. GIZ in collaboration with Tunisian partners is elaborating since November 2017 concepts for [enhancing extended producer responsibility for packaging waste](#). GIZ published in June 2018 the report “Marine Litter Prevention”. It includes a methodology to assess plastic waste pathways from cities into rivers and the sea and a case study of Annaba Province in Algeria. The methodology will be further developed into a tool that serves for baseline studies in coastal and riverine Provinces of Morocco and Egypt in the fourth quarter of 2018.

33. MEDASSET under the “Clean Seas: Swear to Care” campaign managed to promote the concept of reduce-reuse-recycle as well. MEDASSET is part of the Athanasios C. Laskaridis Charitable Foundation Initiative “Cooperation Network the Marine Environment” participating in its

four groups: “Beach Cleanups - Volunteering”, “Single-Use Plastics”, “Lobbying” and “Blue Economy”. The network aims to promote synergies among environmental NGO's, Foundations and other organizations, to understand the needs for marine protection and engage scientists, maritime sector, universities, research institutes, and volunteers.

34. [MIO-ECSDE](#), within the Interreg Med ACT4LITTER project has been effectively promoting the implementation of targeted marine litter prevention and mitigation measures. MIO-ECSDE has been closely working with nine MPA management bodies on the elaboration of MPA-specific action plans for marine litter management.

35. The [National Research Council of Italy \(CNR\)](#) and its [Institute for Polymers Composites and Biomaterials](#) is working on different approaches to mitigate the release of microplastics from synthetic clothes. The first involves the development of functional finishing treatments of fabrics that can protect clothes during washing processes, reducing the amount of microfibres released. Two different strategies were exploited to develop such finishing treatments: one is based on the application of pectin; a natural polymer, the other is related to the use of biodegradable polymers. The treatments were applied at lab scale on polyamide fabric samples and tested in wash trials with the subsequent quantitative evaluation of the number of microfibres released. The second prevention measure is the application of a filtration system to washing machines that could block the release of microplastics into the wastewater. In fact, CNR-IPCB has been collaborating with the company Planet Care which designed a filtration system<sup>4</sup> to be mounted directly on the drain pipe of the washing machine. CNR-IPCB ran washing tests to assess the effectiveness of the filtration system, providing data to the company to improve the design of the system that is currently capable of blocking around the 70% of the microfibres released.

36. [PANACeA](#) through the Interreg Med Biodiversity Protection Community has contributed in producing some Greening events guidelines concerning waste production associated to meetings and catering and promoted these guidelines amongst all the Interreg Med Communities for adoption in organization of project meetings. An open webinar has been organized in summer and the Interreg Med programme will include these greening guidelines in the programme manual for further use. Particular waste management schemes and campaigns by relevant projects are disseminated through social media.

37. [Surfriders Foundation Europe](#) enforced its priority theme of the 2018 joint work plan by educating the citizens, with a general focus on consumer perception aiming to shift from “guilty consumer” to “aware consumer” and by requesting the application of more strict standards and requirements by industry. This was promoted during the Blue Ecoforum as part of the Barcelona Declaration which highlights the following:

- Policies should be endorsed by 2020 to implement strategies for Extended Producer Responsibility (EPR) aiming to the entire products life-cycle, to encourage companies to design reusable and recycling items as well as to reward eco-friendly and innovative products, discourage over-packaged products, and establish relevant taxes.
- To promote national policies and endorse administration of the Mediterranean region by means of tools or support for application of prevention measures by 2025:
  - Deposit, return scheme for beverage packaging;
  - Ban lightweight plastic bags; and
  - Apply fiscal incentives promoting reuse and repairing pattern as well as collaborative economy.

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<sup>4</sup> De Falco et al., Pectin based finishing to mitigate the impact of microplastics released by polyamide fabrics, Carbohydrate Polymers 198 (2018) 175–180

38. Surfriders Foundation Europe proposes the alignment of the Platform with next EU Directive on banning of the Single-Use Products (SUP), with the scope to offer to all the Mediterranean countries the adequate tools, knowledge and support for the development and enhancement of existing legislations and actions related to banning SUP.

39. UN Environment/MAP through its [Sustainable Consumptions and Production Regional Activity Center \(SCP/RAC\)](#) is implementing a number of activities related to the enhancement of the regulatory framework on the non-single use of plastic bags and the promotion of Extended Producer Responsibility (EPR). The national regulatory framework related to non-single use of plastic bags was assessed by SCP/RAC in the framework of the EU-funded Marine Litter MED project also aiming to promote Extended Producer Responsibility (EPR). Similar assessments were carried out for Morocco, Tunisia, Egypt, Lebanon and Algeria. The following activities are currently ongoing:

- Pilot project in Morocco promoting alternatives to single-use plastic bags. Main expected impact: revision of the national ban of single-use plastic bags by the Ministry of industry (SwitchMed);
- Pilot project in Morocco on studying the feasibility of a refund system for beverage containers. Main conclusion: supermarkets are reluctant to engage in waste management activities. A new pilot project to improve the collection of containers and reduce the use will be conducted in a Moroccan university (SwitchMed);
- Technical assistance is provided to the government of Tunisia regarding the development of a draft decree for the banning of conventional plastic bags. Main conclusion drawn: reusable options along with compostable option, should be further promoted (Marine Litter Med and SWIM-H2020);
- Continuous dissemination of the “[25 Innovative Solutions to Combat Plastic Marine Litter](#)” publication towards Mediterranean stakeholders;
- Implementation of the Marine Litter Watch Month activity (winter/ spring/ summer editions), carrying out beach litter surveys to elaborate an assessment report on marine litter (ACT4LITTER project); and
- Methodology for surveying marine litter on beaches has been prepared in accordance with the guidelines the EU Marine Strategy Framework Directive Marine Litter Technical Group and the UN Environment / Mediterranean Action Plan – MEDPOL (ACT4LITTER project).

40. UN Environment/MAP SCP/RAC in close consultation with several Contracting Parties, and further to interviews carried out with experts supported by extensive desk work, SCP/RAC drafted a “Reference document” outlining the state of the art of the legal framework regulating the production/consumption of single use plastic bags in each of the countries. Work is supported by the EU-funded Marine Litter MED project. It aims to explore different voluntary and regulatory measures to reduce the use and production of single-use plastic bags.

41. In the framework of the Cooperation Agreement between the UN Environment/MAP and the Italian Ministry of Environment, Land and Sea (IMELS) support is currently provided to Albania, Bosnia and Herzegovina and Montenegro with regard to the enhancement of the regulatory framework to promote non-single use plastics (single-use plastic bags and PET bottles); improve the collection and recycling of plastic PET bottles; as well as enhance local and national capacities and raise awareness of stakeholders.

#### **d. Assessment and prevention of marine litter impacts on biodiversity, especially in Marine Protected Areas (MPAs)**

42. In supporting the Countries to implement measure to manage different aspects of marine litter, the Secretariat, in cooperation with relevant international and regional organizations, was assigned the task to prepare specific guidelines (Article 14 of the Regional Plan) taking into account, where

appropriate, existing guidelines. Subject to availability of external funds, these guidelines will be published in different Mediterranean region languages. In this respect, work is currently ongoing to develop regional guidelines addressing the following measures:

- “Adopt a beach” measures
- “Fishing for Litter” measures;
- Phase out single-use plastic bags in the Mediterranean region;
- Determine the application of charges at reasonable costs for the use of port reception facilities or, when applicable, application of the No-Special-Fee system; and
- Provision of reception facilities in ports and the delivery of ship-generated wastes.

43. [MEDASSET](#) participates in the MEDSEALITTER project aiming to develop Mediterranean-specific protocols to protect biodiversity from litter impact at basin and local MPAs levels. Activities include monitoring and recording of floating debris, which will be carried out using boats, light aircraft and drones. It will also examine, under laboratory conditions, the concentration of pollutants that may be present in indicator species – such as sea turtles, fish and marine annelids. MEDASSET is contributing to the review of existing methods of monitoring marine pollution, participating in the collection of stranded/dead sea turtles found in Greece and the sending of tissue samples for analysis by the specialized laboratories of the Hellenic Centre for Marine Research. Within the framework of MEDSEALITTER project, the stranding network developed by MEDASSET to collect data was expanded in order to be able to obtain more stranded animals and thus to increase the datasets. Initially MEDASSET was selecting samples of stranded animals from Thessaloniki, Asprovalta, Volos, Skopelos and Kavala. At a later stage MEDASSET started selecting samples from Igoumenitsa, Mytilene, Loutraki, Kerkira, Nafplio, Ierapetra, Lefkada and Alexandroupolis. The corresponding network of veterinaries has been also increased (from initially 5 veterinaries to a total of 13).

44. [MIO-ECSDE](#) within the Interreg Med ACT4LITTER project promotes the application of a harmonized approach for monitoring and assessment marine litter in Med MPAs. It has coordinated three editions of the Marine LitterWatch month (winter, autumn, summer), carried out in some 20 coastal and marine protected areas located in Albania, Croatia, France, Greece, Italy, Slovenia, Spain and Turkey. Currently, MIO-ECSDE is elaborating a snapshot assessment report on marine litter in Mediterranean MPAs. Within the EU funded SWIM-H2020 SM Project, MIO-ECSDE is currently elaborating beach litter assessment reports for Algeria, Egypt and Morocco.

45. [PANACeA](#) will promote and make available all key results coming from the Interreg Med Biodiversity Protection Community and related projects, including prevention measures and decision-making tools to help protected areas manage litter production and reduction, and thus the impact on Mediterranean biodiversity and ecosystems. This information is promoted through various public collaborative events and will also be included in the online platform previously mentioned. To mention an example, visibility is given to clean up campaigns organized by participating projects in protected areas and beaches along the Mediterranean.

46. [PlasticBusters MPAs](#) Med Interreg project deploys the multidisciplinary strategy and common framework of action developed within the Plastic Busters initiative led by the University of Sienna (UNISI) and the Mediterranean hub of SDSN since 2013. This initiative frames the priority actions needed to tackle marine litter in the Mediterranean and was labelled under the Union for the Mediterranean (UfM) in 2016, capturing the political support of 43 UfM countries. The Italian Institute for Environmental Protection and Research (ISPRA) and UNISI (scientific coordinator), will work for four years alongside 13 other Partners and 17 Associated Partners (International Research Institutions, Ministries, National Parks, Environmental Agencies, etc.) for completing project implementation.

47. The overall objective of the PlasticBusters MPAs project is contributing to maintain biodiversity and preserving natural ecosystems in pelagic and coastal MPAs, by defining and implementing a harmonized approach against ML. The project entails actions that address the whole

management cycle of marine litter, from monitoring and assessment to prevention and mitigation, as well as actions to strengthen networking between and among pelagic and coastal MPAs located in Italy, France, Spain, Croatia, Albania and Greece. This is the first project at basin level where EU and IPA countries join forces to tackle marine litter via a coordinated approach in order to:

- i. Diagnose marine litter impacts on biodiversity in MPAs, including the identification of "Marine Litter hotspots";
- ii. Promote the application of harmonized guidelines for monitoring and assessing marine litter in MPAs and SPAMIs in the Mediterranean;
- iii. Define and test tailor-made marine litter surveillance, prevention and mitigation measures in MPAs; and
- iv. Develop a common framework of marine litter actions for Interreg Med regions towards the conservation of biodiversity in Med MPAs.

48. In the framework of the PlasticBusters MPA project, a joint governance plan will be defined through a participatory approach and concretized commitment of Med MPAs (MoUs). The aim of the project is to increase the surface area of supported habitats to attain a better conservation status. Over a 4-year period, the PlasticBusters MPA project will address the entire management cycle of marine litter, from monitoring and assessment to prevention and mitigation, as well as actions to strengthen networking between and among pelagic and coastal marine protected areas located in Albania Croatia Greece Italy, France and Spain. The project also foresees the transfer and capitalization of results and achievements to the Mediterranean basin at large.

49. UN Environment/MAP through its [Specially Protected Areas Regional Activity Center \(SPA/RAC\)](#) is associate partner to the Interreg Med ACT4LLITTER project, which aims to facilitate efforts for tackling marine litter in Mediterranean MPAs through the development of effective and targeted measures towards reaching their conservation objectives via an ecosystem-based approach. SPA/RAC took part to the Act4Litter conference (Isola, Slovenia, 28 November 2017) and the second meeting of the associates partners, held in Pisa, Italy (16-17 May 2018) where MPA managers and marine litter experts collectively reviewed the progress achieved by the project and advanced the quality of its outputs. Partners were invited to disseminate the Decision-Making Tool; one of the main outputs of the project, among the Mediterranean MPAs, and in particular to the southern Mediterranean countries.

50. SPA /RAC with the support of the MEDPOL programme of the UN Environment/MAP co-organised a workshop on “The Mediterranean integrated programme for monitoring pollution impact on marine and coastal ecosystems and biodiversity” during the 2017 Regional Experience-Sharing Workshop of the MedPAN network. Moreover, in the framework of the EU-funded Marine Litter MED project SPA/RAC is coordinating the following activities:

- Identification of the most representative species for the development of the IMAF Candidate Indicator 24;
- Development of a monitoring protocol to assess the interactions between marine litter and marine turtles (ingestion and entanglement) with a view to harmonize methods of data collection. The protocol will be subsequently shared with the SPA/RAC Focal Points aiming to the application of the protocol in the MPAs and SPAMIs.

51. The Union for the Mediterranean (UfM) has integrated as far as possible Plastic Busters activities within the UfM Environment and Blue Economy dossiers (including BlueMed and WestMed) as well as through the Virtual Knowledge Center (VKC). UfM provided PlasticBusters with technical assistance to facilitate funding as well as co-organized the launching event in Siena in April 2018. Synergies with other projects and actions running in the Mediterranean including among the most recent ones include:

- Energy observer expedition and documentary (August 2018);
- Training of environment journalists (November 2018); and

- SwitchMedConnect (November 2018).

**e. Assessment of socio-economic impacts of marine litter, including microplastics, highlighting impacts of marine litter and microplastics on human livelihood (i.e. shellfish, fisheries, fish farming, tourism, etc.)**

52. [PANACeA](#) and the Interreg Med Biodiversity Protection Community are working on an action plan including the production of various documents to highlight the community science and practice findings on the pressures and impacts of marine litter on key species amongst other, in collaboration with the projects mentioned above and supported by PANACeA experts.

53. [MIO-ECSDE](#), within the IPA-Adriatic DeFishGear project has prepared a [report](#) on the understanding of the socio-economic implications of marine litter in the Adriatic-Ionian macro-region. The report clearly demonstrates that the increased costs and potential losses of revenue associated with marine litter for vital economic sectors such as tourism, fisheries, aquaculture and navigation are considerable, and that they negatively affect individuals, enterprises and local communities.

54. UN Environment/MAP through its [PlanBleu](#) and in the framework of the Cooperation Agreement between UN Environment and the Italian Ministry for Environment, Land and Sea is working on a “Socioeconomic analysis on marine litter key best practices to prevent/reduce single use of plastic bags and bottles”. This activity will specifically contribute to the implementation of the UN Environment/MAP Programme of Work (PoW) 2.1.1 Output for the 2018-2019 Biennium. The analysis will use the information drawn from several projects (including pilot projects) implemented or capitalized by components in the UN Environment/MAP system, including:

- The experience gained from the implementation of selected measures in the framework of the EU-funded Marine Litter MED project and the Cooperation Agreement between UN Environment and IMELS;
- The SwitchMED project;
- The ACT4LITTER project;
- The PlasticBusters MPAs project; and
- The international Operation Clean Sweep as appropriate.

**f. Promotion of education, awareness-raising and capacity building**

55. [MEDASSET](#) launched in 2015 the “[Clean Seas: Swear to Care](#)” campaign which aims to encourage the public to protect marine life with the simple yet powerful act of making a promise of not polluting our seas with plastic. MEDASSET’s Clean Seas campaign is still ongoing and is constantly being updated; now focusing on the reduction and prevention of single-use plastic items. MEDASSET is implementing the successful Interactive Sea Turtle Awareness Programme the so-called “[Niretta, the Caretta](#)”. The programme aims to raise awareness of the current status of Sea Turtles in the Mediterranean, their coastal habitat and other related species while pointing out that marine litter is one of the key threats to marine species and habitats. MEDASSET is also participating in the project “[Fishers, Sea Turtles and Sharks: Alliance for Survival](#)” which aims to study and mitigate the impacts of bycatch and ghost fishing on the sea turtle and shark populations in Greece, through awareness, capacity building and cooperation with stakeholders in the fisheries sector. With regards to marine litter, the project includes awareness raising on the impacts of non-selective fishing methods and gears, such as Abandoned Lost or Otherwise Discarded Fishing Gear (ALDFG). The project focuses on five important ports of Greece, which cover a major part of the country’s fishing activity. In addition, and through the MEDSEALITTER project, MEDASSET is preparing and implementing media activities, including a social media activity strategy. MEDASSET also supported the implementation of the Academy Award Nominee Daphne Matziaraki’s film about ghost fishing and its impacts on the marine environment for the “Second Nature” Project by the New Raw, in the framework of the Healthy Seas Initiative. MEDASSET also participated and supported the “[EGEO-The sea for me](#)” documentary by Vicky Markolefa and Bastian Fischer in the framework of sweartocare4islands project, funded by Athanasios C. Laskaridis Charitable Foundation. The

documentary explores the relationship between man and the sea in the heart of the Aegean, and among other issues it also raises awareness about marine litter.

56. [MIO-ECSDE](#) has carried out many educational, awareness-raising and capacity building actions focusing on marine litter in 2018. Indicatively, it has organized three marine litter capacity building workshops in Algeria, Egypt and Morocco within the EU funded SWIM-H2020 SM Project. It also organized three webinars on marine litter monitoring within the framework of the Interreg Med ACT4LITTER and its annual work programme. MIO-ECSDE, within the framework of the Interreg Med ACT4LITTER has also been concretely promoting a list of showcases of concrete marine litter prevention and mitigation measures through a series of information sharing events. Furthermore, it has been closely working with the EEA for the launching of the second edition of the pan-European Marine Litter Watch Month to be held from 17 September to 16 October 2018. MIO-ECSDE has been continuously promoting marine litter related information to its 128-member NGOs. MIO-ECSDE through its pioneer initiative on Education for Sustainable Development (MEIES~ 4000 educators) has been raising awareness on the issue of marine litter through diversified activities (exhibitions, workshops, summer schools, etc.) and it has been promoting relevant information to the three networks of major Mediterranean stakeholders it facilitates, namely the network of Parliamentarians (COMPSUD); the network of Journalists (COMJESD); and the network of Universities (MedUnNet).

57. The [National Research Council of Italy \(CNR\)](#) and its [Institute for Polymers Composites and Biomaterials](#) is strongly active in disseminating the results of its research to raise awareness on the problem of microplastic pollution from synthetic clothes and to promote collaborations among different stakeholders. CNR-IPCB is collaborating with other research institutes, universities and companies to find mitigation solutions to this source of marine pollution and to develop effective methods to assess its environmental impact.

58. [PANACeA](#) promotes marine litter prevention, monitoring and related actions and findings by its community of projects, and disseminates information during their events and through its webpage and social media channel. This includes an exhibition on marine litter held in Rome during the Interreg Med event in April 2018 and another exhibition in Montenegro in May 2018. More information, events and activities can be found on the webpage and various social media accessible through it the following links:

- [Interreg Med Biodiversity Protection Community and projects](#);
- [Shared calendar](#); and
- [ETC-UMA website](#) (PANACeA lead partner).

59. UN Environment/MAP has organized in 2018 three Capacity Building Workshops in Egypt (Feb. 2018), Morocco (Feb. 2018) and Tunisia (Mar. 2018) to support the implementation of the marine litter monitoring programmes and marine litter best practices at national level. Moreover, UN Environment/MAP through its [Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea \(REMPEC\)](#) has prepared a study based on a literature review on existing best practices in the Mediterranean as well as other European Regional Seas for the application of charges at reasonable costs and No-Special-Fee system for the use of port reception facilities. The aforementioned study will be presented as an information document during the Regional Meeting on Marine Litter Best Practices (Izmir, Turkey from 9-10 October 2018).

60. UN Environment/MAP works in close cooperation with the UN Environment Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), benefiting and contributing to the Manila Declaration, the Global Partnership on Marine Litter (GPML), and also supporting the [#CleanSeas](#) and [#BeatPlasticPollution](#) Campaigns and related marine litter initiatives. UN Environment/GPA in the framework of the Global Partnership on Marine Litter (GPML), is establishing Regional Nodes on Marine Litter to coordinate, assist, and facilitate the establishment of cooperation mechanisms at regional level. In that respect, GPA/GPML is financially supporting UN Environment/MAP to establish a Regional/Mediterranean Node on Marine Litter

which aims to support the implementation of the Regional Plan on Marine Litter Management in the Mediterranean. The objectives of the Regional/Mediterranean Node on Marine Litter are to:

- i. Enhance awareness of marine litter prevention and reduction measures and actions undertaken at the regional, national, and local levels;
- ii. Strengthen the exchange of information and knowledge, along with the best practices and measures for prevention and reduction of marine litter in the Mediterranean;
- iii. Establish linkages and synergies with the Global Partnership on Marine Litter (GPML); and
- iv. Enhance knowledge of GPML among local governments, NGOs/NPOs and local people in the Mediterranean.

61. The Mediterranean Node on Marine Litter will be hosted by [Marine Litter Network](#), powered by the Global Partnership on Marine Litter, aiming to be a hub of knowledge and information on marine litter for the region.

62. [Waste Free Oceans \(WFO\)](#) has (re)started the WasteFreeDanube campaign with a kick-off meeting in Vidin, Bulgaria and several follow-up events in Bulgaria extending through the end of the year involving youngsters, local authorities and businesses. WFO is administering cleaning operations at river sides. It plans to make use most of the collected material to produce new products. Another campaign is about to start in Italy (river Po region) which will shortly go to the Azores for a cleanup campaign. Outside the European Union scale, WFO continues to implement the Rio Ozama/Isabella activities where a far advanced stage of an actual investment in a full scale modern plastics recycling plant together with local business partners can be reported.

**Annex I**  
**Regional Cooperation Platform on Marine Litter 2018 Joint Work Plan**

**The 2018 Joint Work Plan on Regional Cooperation Platform on Marine Litter**

- i. Mapping of processes, initiatives and mandates to allow higher effectiveness and better coordination of the collective responses to marine litter challenges:
  - Strengthen the comprehensive and diverse nature of the Platform composition, involving as many stakeholders as resources allow, by suggesting new possible members, with special attention to those from and active in the Southern and Eastern Mediterranean;
  - Encourage stronger commitment of the members of the Platform over the identified priority activities;
  - Host the meetings of the Platform and develop a light mechanism for monitoring/exchanging progress during the year;
  - Take leadership roles within the Platform in competent fields of expertise; and
  - Develop a marine litter-related project inventory and explore opportunities for building synergies.
- ii. Harmonization and standardization of monitoring and assessment methodologies:
  - Explore for synergies with a view to the harmonization of relevant marine litter monitoring protocols (including marine litter recording lists) and corresponding metadata and reporting templates;
  - Further advance knowledge and understanding on the marine litter sources, origin and pathways including related aspects (place, time, duration, and volume of marine litter loads);
  - Ensure more reliable and standardized data by enhancing the research and monitoring interface; and
  - Improve data availability by supporting more efficient exchange between existing databases.
- iii. Contribution to and promote effective waste management schemes and use of prevention tools, taking of related socio-economic aspects:
  - Promote reduce, reuse, recycle and redesign schemes;
  - Ensure upstream reduction of marine litter by strengthening prevention measures and promoting extended producer responsibility (EPR) schemes, including the involvement of the tourism industry;
  - Draw special attention to the effective management of single-use plastic items with the aim to avoid/reduce their inputs in the marine and coastal environment. These items being used in everyday life are a significant source of marine litter (i.e. due to their light weight it is easy to be transferred by wind or rivers and their fragmentation process it is much faster);
  - Draw special attention to the design of the waste water treatment systems (e.g. use of filters, etc.) in such a way so that microplastics (including fibers) releases into the marine environment are prevented;
  - Support the dissemination of practical tools, including greening practices and information for entrepreneurs, businesses, civil society organizations and administrations to effectively tackle marine litter problem with specific examples; and
  - Encourage the identification of plastic producers in the Mediterranean.

- iv. Assessment and prevention of marine litter impacts on biodiversity, especially in Marine Protected Areas (MPAs):
  - Assess impacts of marine litter and microplastics, and identify hotspot areas where marine litter is accumulating, especially on MPAs in the Mediterranean and Specially Protected Areas of Mediterranean Importance (SPAMIs); and
  - Promote the application of harmonized guidelines for monitoring and assessing marine litter in MPAs and SPAMIs in the Mediterranean.
- v. Assess socio-economic impacts of marine litter, including microplastics, highlighting impacts of marine litter and microplastics on human livelihood (i.e. shellfish, fisheries, fish farming, tourism, etc.).
- vi. Education, awareness-raising and capacity building:
  - Identification, testing and dissemination of best practices among all members to ensure most effective actions;
  - Promoting Massive Open Online Course (MOOC) on marine litter and the UN Environment #CleanSeas Campaign;
  - Promote Platform in members' networks;
  - Exchange information on relevant national, regional and international events among members and provide visibility to the Platform when participating in them;
  - Contribute to the development of the Mediterranean Node on Marine Litter;
  - Use of raising awareness tools like the EEA Marine LitterWatch smartphone application, as a tool for collecting clean up beach marine litter data; and
  - Prepare a marine litter glossary.