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**United Nations  
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ENGLISH



**MEDITERRANEAN ACTION PLAN**

Meeting of MED POL Focal Points

Barcelona (Spain), 18-21 June 2013

**Regional Plan for the Marine Litter Management in the Mediterranean**

**Delegates are kindly requested to bring their documents to the meeting**



## Introduction

The problem of marine litter is steadily gaining importance in the last decade at the global, regional and national levels. It poses a complex and multi-dimensional challenge with significant implications for the marine and coastal environment and human activities all over the world. The significant marine litter reduction at global level was the only new target agreed at the Rio+20 summit in 2012.

In the Mediterranean the problem of marine litter was identified a long time ago and UNEP MAP started with the active work on this problem almost thirty years ago. It is not the intention of this introduction to overview the history of relevant activities of UNEP MAP on this problem, but to present the current situation and active approach in order to deal with the problem of marine litter.

An important step forward towards dealing with the marine litter problem was adoption of Decision IG.20/10 at the 17<sup>th</sup> Meeting of the Contracting Parties of the Barcelona Convention (Paris, February 2012) entitled "*Adoption of the Strategic Framework for Marine Litter management*". This Strategic Framework analyses the problem and is proposing quite a number of activities that would help in approaching in a systematic way the problem of marine litter. COP 17 also adopted the ecological objective on marine litter in the framework of the ecosystem approach. Decision IG.20/10 mandated the Secretariat to prepare the *Regional Plan on Marine Litter Management in the Mediterranean in the Framework of Article 15 of the LBS Protocol*.

The marine litter complexity in terms of its diverse sources and impacts is generally dealt with within the Barcelona Convention system through the LBS Protocol including also both marine litter and solid waste as priority pollutants and sectors in its annexes; to some extent through the establishment of port reception facilities under the Prevention and Emergency Protocol. The impact of marine litter to the status of specially protected areas and the endangered species is envisaged under the SPA and Biodiversity Protocol, mainly in some of the Regional plans for endangered species. In addition the Offshore Protocol also offers some provisions with regard to garbage management from offshore installations. From the programmatic and institutional point of view, MEDPOL is the operational programme of MAP that had led the management of marine litter since the beginning, followed by CP RAC with regards to promotion of SCP tools as prevention measures. The other RACs have contributed to the analysis and assessment of drivers behind marine litter (Blue Plan), while REMPEC and SPA RAC provided support to the Contracting Parties in accordance with the relevant provisions of the Protocols under their responsibility,

Therefore the legal basis for the preparation of the Regional Plan was:

- Article 15 of the LBS Protocol concerning regional action plans and programmes containing legally binding measures and timetables for their implementation, as well as Annex 1 section C, point 14 of the same Protocol;
- Article 5 of the LBS Protocol concerning elaboration and implementation of national and regional action plans and programmes for elimination of pollution deriving from land-based sources;
- Measures on Control of pollution by persistent synthetic materials in the Mediterranean Sea adopted by the 7<sup>th</sup> Meeting of the Contracting Parties (Cairo, October 1991);
- Legal obligations with regard to marine litter and the relevant work carried out within the framework of the Protocols of the Barcelona Convention; and

- Decisions of the meetings of the Contracting Parties regarding the implementation since 2008 of the Ecosystem Approach by MAP, including Decision IG 20/4 on the adoption of Marine litter Ecological Objective for the Mediterranean.

The preparation of the Regional Plan considered the following major global and regional decisions and work:

- United Nations General Assembly resolutions A/RES/60/30 and A/RES/63/111 on Oceans and the Law of the Sea (2005 and 2008) and resolutions A/RES/60/31 and A/RES/63/112 on sustainable fisheries (2005 and 2008);
- UNEP Global Marine Litter Initiative and the GPA Manila Declaration 2012, that took an active lead in assisting twelve Regional Seas Programmes in organizing and implementing regional activities on marine litter;
- Commitments endorsed by the Fifth International Marine Debris Conference and the Honolulu Strategy (2011), a global framework strategy to prevent, reduce, and manage marine litter;
- Relevant legal instruments and programmes of the EC, Baltic Sea, Black Sea and NE Atlantic; and
- Message from the International Conference on Prevention and Management of Marine Litter in European Seas" (Berlin, May 2013) that reaffirmed relevant Rio+20 commitments; reconfirmed that key principles to address marine litter are precautionary, polluter pays and prevention at source; and agreed on 10 priority actions contributing to the Rio+20 target, to regional action, to national measures and to the EU quantitative reduction target under development.

The assessment of the status of marine litter in the Mediterranean prepared by MAP partners in 2008 in the framework of UNEP/MAP MED POL Programme found that:

- a) Most of marine litter come from land based sources;
- b) Inadequate solid waste management is a major driver to generate marine litter in the region;
- c) Data gaps and inconsistency exists at national, sub regional and regional levels;
- d) Monitoring of marine litter needs substantive improvement; and
- e) There is high potential to implement recycling and prevention measures in the region.

Therefore the proposed Regional Plan has been designed to address the above major challenges through the measures related to:

- a) Integration of marine litter management into the LBS National Action Plans;
- b) Improvement of solid waste management;
- c) Adoption of the necessary appropriate legislation and establishment of adequate institutional arrangements to ensure the efficient management of marine litter;
- d) Prevention of marine litter input to the marine and coastal environment;
- e) Removal of existing marine litter and its disposal;
- f) Assessment of the state of marine litter in the Mediterranean;
- g) Development and implementation of the Mediterranean Marine Litter Monitoring Programme;
- h) Enhancement of public awareness and education;

- i) Stakeholder participation;
- j) Regional and international cooperation; and
- k) Enforcement and regular reporting.

The cost benefit analysis of the implementation of the measures provided for in the Regional Plan at national and regional level remains to be done in the future.

The regional Plan has three Appendixes that constitute an integral part of the Regional Plan. The appendixes address the work plan and timetables; research topics and reporting obligations. The Secretariat has also prepared a background document to facilitate the discussion of the marine litter specific measures provided for in the regional Plan.

The Regional Plan was prepared by UNEP/MAP-MEDPOL in close collaboration with CP/RAC, REMPEC, SPA RAC and other regional competent organizations such as ACCOBAMS, UNEP/GPA, UNEP/NOWPAP and with contributions from EU MSFD sub group on marine litter.

## **Part I – General Provisions**

### **Article 1**

#### **Rationale for the Regional Plan**

Marine litter is a complex, multi-dimensional and multi-sectoral problem, with significant implications for the marine and coastal environment at a global level. These impacts are environmental, economic, health and safety and cultural, rooted in our prevailing production and consumption patterns. The problem originates mostly from land-based activities and sea-based activities, as well as lack of governmental financial resources, inadequate legal enforcement systems and general lack of understanding of the public's co-responsibility.

The rationale for the preparation of this Regional Plan is to improve the quality of the marine and coastal environment in accordance with the provisions of the LBS Protocol and to achieve the goals set by the decisions of the 17<sup>th</sup> meeting of the Contracting Parties in 2012, Decision IG.20/4: "Implementing MAP ecosystem approach roadmap: Mediterranean Ecological and Operational Objectives, Indicators and Timetable for implementing the ecosystem approach roadmap" and Decision IG 20/10: 'Adoption of the Strategic Framework for Marine Litter management', at the considerable lower cost than with the no action scenario.

Work Plan with timetable for the implementation of relevant Articles of this Regional Plan is presented in the Appendix 1 of this Regional Plan<sup>1</sup>.

### **Article 2**

#### **Geographical coverage**

The area to which this Regional Plan applies is the area defined in Art. 3 of the LBS Protocol.

### **Article 3**

#### **Definition of terms**

For the purpose of this Regional Plan:

*Marine litter*, regardless of the size, means any persistent, manufactured or processed solid material discarded, disposed of or abandoned in the marine and coastal environment.

*Litter monitoring* means repeated surveys of beaches, sea bed, water column, surface waters and biota to determine litter types and quantities in a representative manner such that information can be compared with baseline data to follow trends. *Barcelona Convention* means the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, 1995 hereinafter referred to as the Barcelona Convention.

*LBS Protocol* means the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities, 1996, hereinafter referred to as the LBS Protocol.

*Secretariat* means the body referred to in Article 17 of the Barcelona Convention.

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<sup>1</sup> The meeting recommended the MED POL Focal points to remove Appendix I from the Regional Plan to avoid its consideration as legally binding, and attach it instead as Annex to the draft Decision for the adoption of the Regional Plan.

*LBS National Action Plan* means the national action plans containing measures and timetables for their implementation developed by the Contracting Parties in accordance with Article 5 of the LBS Protocol as endorsed by the 14<sup>th</sup> meeting of the CP with the view to implement the Strategic Action Programme (SAP-MED) to combat land-based sources in the Mediterranean adopted by the Contracting Parties in 1997,

## Article 4

### Objectives and principles

#### **Objectives**

The main objectives of the Regional Plan are to:

- (a) Prevent and reduce to the minimum marine litter pollution in the Mediterranean and its impact on ecosystem services, habitats, species in particular the endangered species public health and safety;
- (b) Remove to the extent possible already existent marine litter;
- (c) Enhance knowledge on marine litter; and
- (d) Achieve that the management of marine litter in the Mediterranean is performed in accordance with accepted international standards and approaches as well as those of relevant regional organizations and as appropriate in harmony with programmes and measures applied in other seas.

#### **Principles**

In implementing the Regional Plan, the Contracting Parties shall be guided by the following principles:

- (a) *Integration Principle* by virtue of which marine litter management shall be an integral part of the solid waste management and other relevant strategies;
- (b) *Prevention principle* by virtue of which any marine litter management measure should aim at addressing the prevention of marine litter generation at the source;
- (c) *Precautionary principle* by virtue of which where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation;
- (d) *Polluter-pays principle* by virtue of which the costs of pollution prevention, control and reduction measures are to be borne by the polluter, with due regard to the public interest;
- (e) *Ecosystem-based approach* by virtue of which the cumulative effects of marine litter on marine and coastal ecosystem services, habitats and species with other contaminants and substances that are present in the marine environment should be fully taken into account;
- (f) *The principle of public participation and stakeholder involvement*; and
- (g) *Sustainable Consumption and Production principle* by virtue of which current unsustainable patterns of consumption and production must be transformed to sustainable ones that decouple human development from environmental degradation.

## Article 5

### Preservation of rights

The provisions of this Regional Plan shall be without prejudice to stricter provisions respecting marine litter management measures contained in other existing or future national, regional or international instruments or programmes.

## ***Part II – Measures and operational targets***

### **Article 6**

#### **Coherence and integration of measures**

The Contracting Parties shall make every effort that the measures provided for in Articles 7-10 are implemented in a coherent manner to achieve good environmental status and respective targets on marine litter. Various actors shall be involved in the development and implementation of agreed measures as provided for in the Article 17.

### **Article 7**

#### **Integration of marine litter measures into the LBS National Action Plans**

1. The Contracting Parties in accordance with Article 5 of the LBS Protocol shall update<sup>2</sup> by 2015 the existing LBS National Action Plans to integrate marine litter measures in accordance with the provisions of this Regional Plan. To this aim, the Secretariat shall update by 2014 the existing LBS National Action Plan guidelines.
2. The LBS National Action Plan shall include:
  - (a) Development and implementation of appropriate policy, legal instruments and institutional arrangements, including adequate solid waste and sewer system management plans, which shall incorporate marine litter prevention and reduction measures;
  - (b) Monitoring and assessment programmes for marine litter;
  - (c) National and local measures to prevent and reduce generation of marine litter;
  - (d) Programmes of removal and environmentally sound disposal of existing marine litter; and
  - (e) Awareness and education programmes.

### **Article 8**

#### **Legal and institutional aspects**

1. For the purpose of implementing the Regional Plan, the Contracting Parties shall adopt the necessary appropriate legislation and/or establish adequate institutional arrangements to ensure efficient marine litter reduction and the prevention of its generation.
2. To this aim the Contracting Parties shall ensure:
  - (a) Institutional coordination, where necessary, among the relevant national policy bodies and relevant regional organisations and programmes, in order to avoid sectoral approaches; and
  - (b) Close coordination and collaboration between national regional and local authorities in the field of marine litter management.

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<sup>2</sup> Pending final decision by the MED POL Focal points in Barcelona June 2013, regarding the update of the LBS NAPs.



3. The Contracting Parties shall give due consideration to the implementation of the relevant related provisions of the Protocols<sup>3</sup> adopted in the framework of the Barcelona Convention affecting marine litter management to enhance efficiency, synergies and maximise the results.

## Article 9

### Prevention of marine litter

In conformity with the objectives and principles of the Regional Plan the Contracting Parties shall:

#### Land-based Sources

1. By the year 2025 at latest, to base urban solid waste management on reduction at source, separate collection, recycling, composting of the organic fraction and environmentally sound disposal (SAP-MED<sup>4</sup>).
2. By [2017] [2019] implement adequate waste reducing/reusing/recycling measures in order to reduce the fraction of plastic packaging waste that goes to landfill or incineration.
3. By 2017 [apply as appropriate] [explore and implement to the extent possible] prevention measures related to:
  - (a) Extended Producer Responsibility strategy by making the producers, manufacturer brand owners and first importers responsible for the entire life-cycle of the product with measures prioritizing the hierarchy of waste management in order to encourage companies to design products for reuse, recycling and materials reduction in weight and toxicity;
  - (b) Sustainable Procurement Policies contributing to the promotion of the consumption of recycled plastic-made products;
  - (c) Establishment of voluntary agreements with retailers and supermarkets to set an objective of reduction of plastic bags consumption and /or establishment of plastic bag taxes; and
  - (d) Establishment of mandatory Deposits, Return and Restoration System for expandable polystyrene boxes in the fishing sector
  - (e) Establishment of mandatory Deposits, Return and Restoration System for beverage packaging prioritizing when possible their reuse.

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<sup>3</sup> Specifically in the framework of the Protocol Concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea, 2002 (Port reception facilities); Protocol for the Prevention and Elimination of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea, 1995 (waste dumping prohibition); Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean, 1995 (Regional Plans to protect endangered species; establishment of SPA and SPAMIs); Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil, 1994 (prohibition of the disposal of garbage from offshore installations); and the Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movement of Hazardous Wastes and their Disposal, 1996.

<sup>4</sup> Strategic Actions Programme to reduce pollution from Land-Based Activities, MAP Technical Reports Series 119 (p.9).

4. Take necessary measures to establish by year 2020 [2025] adequate urban sewer, wastewater treatment plants, and waste management systems to prevent run-off and riverine inputs of litter.

#### Sea-based Sources

5. In accordance with Article 14 of the Prevention and Emergency Protocol explore and implement to the extent possible by 2017, ways and means to charge reasonable cost for the use of port reception facilities or when applicable, apply No-Special-Fee system. The Contracting Parties shall also take the necessary steps to provide ships using their ports with updated information relevant to the obligation arising from Annex V of MARPOL Convention<sup>5</sup> and from their legislation applicable in the field.
6. [Explore and implement to the extent possible] [Apply as appropriate] by 2017 the “Fishing for Litter” system, in consultation with the competent international and regional organizations, to facilitate clean up of the floating litter and the seabed from marine litter caught incidentally and/or generated by fishing vessels in their regular activities including derelict fishing gears.
7. [Explore and implement to the extent possible] [Apply as appropriate] by 2017 “Gear marking to indicate ownership” concept and ‘reduced ghost catches through the use of environmental neutral upon degradation of nets, pots and traps concept’, in consultation with the competent international and regional organizations in the fishing sector.
8. Apply by 2017 the necessary measures to prevent any marine littering from dredging activities in accordance with the relevant guidelines adopted in the framework of Dumping Protocol of the Barcelona Convention.
9. The Contracting Parties shall take the necessary measures by 2020 to close the existing illegal dump sites in the geographical area of the Regional Plan.
10. The Contracting parties shall sanction illegal dumping in accordance with national legislation including littering on the beach, illegal sewage disposal in the coastal zone and rivers in the area of the application of the Regional Plan in accordance with national legislation.

### **Article 10**

#### **Removing existing marine litter and its environmentally sound disposal<sup>6</sup>**

The Contracting Parties shall remove existent accumulated litter, subject to EIA procedure, [in a regular manner] [at least annually], in particular from specially protected areas and SPAMIs and litter impacting endangered species listed in Annexes II and III of the SPA and Biodiversity Protocol. To this aim the Contracting Parties undertake to [Explore and implement to the extent possible] [Apply as appropriate] the following measures by [2017][2019]:

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<sup>5</sup> International Convention for the Prevention of Pollution From Ships.

<sup>6</sup>For the implementation of the measures provided for in paragraph 1 of this Article, the Contracting Parties shall [may] take into account the elements presented in the information document “*Background information for some specific measures for management and monitoring of marine litter*”.

- (a) Identify in collaboration with relevant stakeholders accumulations/hotspots of marine litter and implement compulsory national programmes on their regular removal and sound disposal;
- (b) Implement National Marine Litter Cleanup Campaigns on a regular basis;
- (c) Participate in International Coastal Cleanup Campaigns and Programmes;
- (d) Apply as appropriate Adopt-a-Beach or similar practices and enhance public participation role with regard to marine litter management;
- (e) Apply Fishing for Litter practices, in consultation with the competent international and regional organizations and in partnership with fishermen and ensure adequate collection, sorting, and environmentally sound disposal of the fished litter; and
- (f) Charge reasonable costs for the use of port reception facilities or, when applicable apply No-Special-Fee system, in consultation with competent international and regional organizations, when using port reception facilities for implementing the measures provided for in Article 10.

### ***Part III – Assessment***

#### **Article 11**

##### **Assessment of the state of marine litter in the Mediterranean**

1. The Contracting Parties shall assess in the framework of ecosystem approach the state of marine litter, the impact of marine litter on the marine and coastal environment and human health as well as the socio-economic aspects of marine litter management based on common agreed methodologies, national monitoring programmes and surveys.
2. The Secretariat shall prepare the Assessment of the state of marine litter in the Mediterranean every six years using results of the national monitoring programmes and applied measures with the view to address priority issues and major information and data gaps all other available relevant regional and international data and where appropriate responses by the Contracting Parties to specific marine litter related questionnaires prepared by the Secretariat.
3. The first *Assessment of the state of marine litter in the Mediterranean* shall be submitted to the meeting of the Contracting Parties four years after entry into force of the Regional Plan.

#### **Article 12**

##### **Mediterranean Marine Litter Monitoring Programme**

1. Based on ecosystem approach ecological objectives and integrated monitoring programme, and in synergy with the relevant international and regional guidelines and documents the Secretariat shall:
  - (a) Prepare by [2014] [2015] the Regional Marine Litter Monitoring Programme, as part of the integrated regional monitoring programme;
  - (b) Establish in 2016 the Regional Data Bank on Marine Litter; and
  - (c) Establish by 2014 Expert Group on Regional Marine Litter Monitoring Programme, in the framework of the Ecosystem Approach implementation.

2. For the purpose of this Regional Plan and in compliance with the monitoring obligations under Article 12 of the Barcelona Convention and Article 8 of the LBS Protocol, the Contracting Parties shall design by [2015][2017] in cooperation with the Secretariat, *National Monitoring Programme on Marine Litter*. The Contracting Parties shall report biennially, in accordance with Article 13 of the LBS Protocol, on the implementation of the National Monitoring Programme.
3. The National Monitoring Programmes should take into account the need for harmonization and consistency with the integrated regional monitoring programme based on ecosystem approach and consistency with other regional seas.
4. To this aim, the Secretariat shall prepare, in collaboration with the relevant regional organisations, by 2014 the *Guidelines for the preparation of the National Marine Litter Monitoring Programmes*.
5. The Contracting Parties while implementing the measures provided for in Articles 9 and 10 of the Regional Plan [shall][may] enhance knowledge and collect information on the state of the marine litter.

#### ***Part IV – Support to Implementation***

##### **Article 13**

##### **Research topics and scientific cooperation**

The Contracting Parties agree to cooperate, with support from the Secretariat, with competent international and regional organizations and relevant scientific institutions, on marine litter issues that due to their complexity require further research. The list of potential research topics is presented in the Appendix 2 to this document<sup>7</sup>.

##### **Article 14**

##### **Specific guidelines**

The Secretariat in cooperation with relevant international and regional organizations, shall prepare specific guidelines taking into account where appropriate existing guidelines, to support and facilitate the implementation of measures provided for in articles 9 and 10 of the Regional Plan. Subject to availability of external funds such guidelines shall be published in different Mediterranean region languages.

##### **Article 15**

##### **Technical assistance**

For the purpose of facilitating the implementation of the measures and monitoring obligations as provided for in Articles 7–10 and 12 of the Regional Plan, technical assistance shall be provided, including capacity building, by the Secretariat to the Contracting Parties in need of assistance.

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<sup>7</sup> The meeting recommended the MED POL Focal points to remove Appendix II from the Regional Plan to avoid its consideration as legally binding, and attach it instead as Annex to the draft Decision for the adoption of the Regional Plan.

## **Article 16**

### **Enhancement of public awareness and education**

1. Due to the nature of the marine litter management issue enhancement of public awareness and education is very important component of the marine litter management.
2. To this aim the Contracting Parties shall undertake, where appropriate in partnership with civil society, public awareness and education activities, with adequate duration and follow up, with regard to marine litter management including activities related to prevention and promotion of sustainable consumption and production.

## **Article 17**

### **Major groups and stakeholder participation**

For the effective implementation of the Regional Plan, the Contracting Parties shall ensure appropriate involvement of various stakeholders including local authorities, civil society, private sector (producers, garbage collection and treatment companies, etc.) and other stakeholders as appropriate to implement the measures provided for in the Regional Plan and other measures as appropriate:

- (a) Regional, National and local authorities;
- (b) Maritime sector;
- (c) Tourism sector;
- (d) Fisheries and Aquaculture;
- (e) Industry; and
- (f) Civil society.

## **Article 18**

### **Regional and international cooperation**

1. For the purpose of facilitating the implementation of the Regional Plan the Secretariat shall establish institutional cooperation with various relevant regional and global institutions and initiatives.
2. The Contracting Parties shall cooperate directly or with the assistance of the Secretariat or the competent international and regional organizations to address trans-boundary marine litter cases.

## **Article 19**

### **Reporting**

1. In conformity with Article 26 of the Barcelona Convention and Article 13, paragraph 2(d), of the LBS Protocol the Contracting Parties shall report on a biennial basis on the implementation of this Regional Plan, in particular the implementation of the above measures, their effectiveness and difficulties encountered. The major reporting elements are provided in Appendix 3 of the Regional Plan<sup>8</sup>.

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<sup>8</sup> The meeting recommended the MED POL Focal points to remove Appendix III from the Regional Plan to avoid its consideration as legally binding, and attach it instead as Annex to the draft Decision for the adoption of the Regional Plan.

2. The Contracting Parties shall review biennially the status of implementation of the Regional Plan upon its entry into force, on the basis of the regional report prepared by the Secretariat.

### ***Part V – Final Provisions***

#### **Article 20**

##### **Implementation timetable**

The Contracting Parties shall implement this Regional Plan, in particular the above measures according to the timetables indicated in the respective Articles of the Regional Plan.

#### **Article 21**

##### **Entry into force**

The present Regional Plan will enter into force and become binding on the 180 day following the day of notification by the Secretariat in accordance with Article 15, paragraph 3 and 4 of the LBS Protocol.

#### **Article 22**

##### **Enforcement of measures**

The Contracting Parties shall take the necessary actions to enforce the measures in accordance with their national regulations.

Appendix 1<sup>9</sup>

## Work Plan with timetable for the implementation of relevant Articles of the Marine Litter Regional Plan

	Article	Task	Timetable	Lead Authority	Verification indicator	Cost <sup>10</sup>	Financial source
<b>PART II - MEASURES AND OPERATIONAL TARGETS</b>							
1.	<b>Art. 7 - Integration of marine litter measures into the LBS National Action Plans</b>	Update the existing LBS National Action Plan guidelines	2014	MEDPOL, in consultation with regional and international organizations	Guidelines sent to Contracting Parties		Secretariat
2.		Update the existing LBS National Action Plans to integrate marine litter measures in accordance with the provisions of the Regional Plan	2015	Contracting Party, in consultation with MEDPOL	Updated LBS National Action Plan sent to the Secretariat		Contracting Party
3.		Development of reporting format	2014	MEDPOL, in consultation with regional and international organizations	Reporting format sent to countries		Secretariat
4.		National reports on the implementation of the Regional Plan	Biennially, together with the report for the implementation of the LBS protocol	Contracting Party	Report sent to Secretariat		Contracting Party
5.	<b>Art. 9 – Prevention of</b>	To base urban solid waste management on reduction at source, separate	2025	Contracting Party, in cooperation with the	Report sent to Secretariat		Contracting Party

<sup>9</sup> Pending decision by the MEDPOL FP meeting in June 2013.

<sup>10</sup> Costs will be estimated at the later stage of the development of the Regional Plan since for number of activities inputs are needed from Contracting Parties.

	<b>marine litter</b>	collection, recycling, composting of the organic fraction and environmentally sound disposal (SAP-MED)		CP/RAC and MED POL			
6.		Implement adequate waste reducing/reusing/ recycling measures in order to reduce the fraction of plastic packaging waste that goes to landfill or incineration	2017 [2019]	Contracting Party, in cooperation with CP/RAC	Report sent to Secretariat		Contracting Party
7.		[Apply as appropriate] [explore and implement to the extent possible] prevention measures related to Extended Producer Responsibility strategy by making the producers, manufacturer brand owners and first importers responsible for the entire life-cycle of the product with measures prioritizing the hierarchy of waste management in order to encourage companies to design products for reuse, recycling and materials reduction in weight and toxicity	2017	Contracting Party, in cooperation with CP/RAC	Report sent to Secretariat		Contracting Party
8.		[Apply as appropriate] [explore and implement to the extent possible] prevention measures related to Sustainable Procurement Policies contributing to the promotion of the consumption of recycled plastic-made products	2017	Contracting Party, in cooperation with CP/RAC	Report sent to Secretariat		Contracting Party
9.		[Apply as appropriate] [explore and implement to the extent possible] prevention measures related to establishment of voluntary agreements with retailers and supermarkets to set an objective of reduction of plastic bags consumption and/or establishment of plastic bag taxes	2017	Contracting Party, in cooperation with CP/RAC	Report sent to Secretariat		Contracting Party
10.		[Apply as appropriate] [explore and	2017	Contracting Party, in	Report sent to		Contracting



		implement to the extent possible] prevention measures related to establishment of mandatory Deposits, Return and Restoration System for expandable polystyrene boxes in the fishing sector		cooperation with CP/RAC	Secretariat		Party
11.		[Apply as appropriate] [explore and implement to the extent possible] prevention measures related to establishment of mandatory Deposits, Return and Restoration System for beverage packaging prioritizing when possible their reuse	2017	Contracting Party, in cooperation with CP/RAC	Report sent to Secretariat		Contracting Party
12.		Take necessary measures to establish adequate urban sewer, wastewater treatment plants and waste management systems to prevent run-off and riverine inputs of litter	2020 [2025]	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat		Contracting Party
13.		In accordance with Article 14 of the Prevention and Emergency Protocol explore and implement to the extent possible ways and means to charge reasonable cost for the use of port reception facilities or when applicable, apply No-Special-Fee system and take the necessary steps to provide ships using their ports with updated information relevant to the obligation arising from Annex V of MARPOL Convention and from their legislation applicable in the field	2017	Contracting Party, in cooperation with REMPEC	Report sent to Secretariat		Contracting Party
14.		[Explore and implement to the extent possible] [Apply as appropriate] the "Fishing for Litter" system, in consultation with the competent international and regional organizations, to facilitate clean up of the floating litter and the seabed from marine litter caught incidentally and/or generated by fishing vessels in their	2017	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat		Contracting Party

		regular activities including derelict fishing gears					
15.		[Explore and implement to the extent possible] [Apply as appropriate] “Gear marking to indicate ownership” concept and “reduced ghost catches through the use of environmentally neutral upon degradation of nets, pots and traps concept”, in consultation with the competent international and regional organizations in the fishing sector	2017	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat		Contracting Party
16.		Apply necessary measures to prevent any marine littering from dredging activities in accordance with the relevant guidelines adopted in the framework of Dumping Protocol of the Barcelona Convention	2017	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat		Contracting Party
17.		Take the necessary measures to close the existing illegal dump sites in the geographical area of the Regional Plan	2020	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat		Contracting Party
18.		Sanction illegal dumping in accordance with national legislation including littering on the beach, illegal sewage disposal in the coastal zone and rivers in the area of the application of the Regional Plan in accordance with national legislation	2017	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat		Contracting Party
19.	<b>Art. 10 – Removing existing marine litter and its environmentally sound disposal</b>	Identify in collaboration with relevant stakeholders accumulations / hotspots of marine litter and implement compulsory national programmes on their regular removal and sound disposal	2017 [2019]	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat		Contracting Party
20.		Implement National Marine Litter Cleanup Campaigns on regular basis	2017 [2019]	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat		Contracting Party
21.		Participate in International Coastal Cleanup Campaigns and Programmes	2017 [2019]	Contracting Party, in cooperation with	Report sent to Secretariat		Contracting Party

				MEDPOL			
22.		Apply as appropriate Adopt-a-Beach or similar practices and enhance public participation role with regards to marine litter management	2017 [2019]	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat		Contracting Party
23.		Apply Fishing for Litter practices, in consultation with the competent international and regional organizations and in partnership with fishermen and ensure adequate collection, sorting and environmentally sound disposal of the fished litter	2017 [2019]	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat		Contracting Party
24.		Charge reasonable costs for the use of port reception facilities or, when applicable apply No-Special-Fee system, in consultation with competent international and regional organizations when using port reception facilities for implementing the measures provided for in Article 10.	2017 [2019]	Contracting Party, in cooperation with REMPEC	Report sent to Secretariat		Contracting Party
<b>PART III - ASSESSMENT</b>							
25.	<b>Art. 11 – Assessment of the state of marine litter in the Mediterranean</b>	Assessment of the state of marine litter in the Mediterranean	Every six years, first report 4 years after entry into force of the Regional Plan	MEDPOL	Report issued		Secretariat
26.	<b>Art. 12 – Mediterranean Marine Litter Monitoring Programme</b>	Establishment of an Expert Group on Regional Marine Litter Monitoring Programme	2014	MEDPOL	Expert Group established		Secretariat
27.		Guidelines for the preparation of the National Marine Litter Monitoring Programmes, in collaboration with the relevant regional organizations	2014	MEDPOL, in consultation with regional and international organizations	Guidelines prepared		Secretariat
28.		Preparation of the Regional Marine Litter	2014 [2015]	MEDPOL, in	Regional		Secretariat

		Monitoring Programme, as part of the integrated regional monitoring programme		consultation with regional and international organizations	Marine Litter Monitoring Programme prepared		
29.		For the purpose of the Regional Plan and in compliance with the monitoring obligations under Article 12 of the Barcelona Convention and Article 8 of the LBS Protocol design in cooperation with the Secretariat National Monitoring Programme on Marine Litter	2015 [2017]	Contracting Party, in consultation with MEDPOL	Implementation started		Contracting Party
30.		Report, in accordance with Article 13 of the LBS Protocol, on the implementation of the National Marine Litter Monitoring Programme	Biennially	Contracting Party	Report sent to the Secretariat		Contracting Party
31.		Establishment of the Regional Data Bank on Marine Litter	2016	MEDPOL, in consultation with regional and international organizations	Data Bank established		Secretariat
32.		While implementing measures provided for in Articles 9 and 10 of the Regional Plan enhance knowledge and collect information on the state of the marine litter		Contracting Parties	Report sent to the Secretariat		Contracting Party
<b>PART IV - SUPPORT TO IMPLEMENTATION</b>							
33.	<b>Art. 13 – Research topics and scientific cooperation</b>	Assistance for scientific cooperation	As appropriate	MEDPOL, CP/RAC, REMPEC, SPA/RAC, in consultation with regional and international organizations	Assistance provided		Secretariat
34.	<b>Art. 14 – Specific guidelines</b>	Preparation of specific guidelines for measures listed in Articles 9 and 10 of the Regional Plan	2015 – 2017	MEDPOL, CP/RAC, REMPEC, SPA/RAC, in consultation with regional and	Guidelines published		Secretariat

				international organizations			
35.	<b>Art. 15 - Technical assistance</b>	Technical assistance, including capacity building provided	As appropriate	MEDPOL, CP/RAC, REMPEC, SPA/RAC, in consultation with regional and international organizations	Report sent to Secretariat		Secretariat
36.	<b>Art. 16 – Enhancement of public awareness and education</b>	Undertaking, where appropriate in partnership with civil society, public awareness and education activities with adequate duration and follow up, with regard to marine litter management including activities related to prevention and promotion of sustainable consumption and production	As appropriate	Contracting Party, in consultation with MEDPOL	Report sent to Secretariat		Contracting Party
37.	<b>Art. 17 – Major groups and stakeholder participation</b>	Ensure appropriate involvement of various stakeholders including local authorities, civil society, private sector and other stakeholders as appropriate to implement the measures provided for in the Regional Plan and other measures as appropriate	As appropriate	Contracting Party, in consultation with MEDPOL	Report sent to Secretariat		Contracting Party
38.	<b>Art. 18 – Regional and international cooperation</b>	Establishment of institutional cooperation with various relevant regional and global institutions and initiatives	As appropriate	MEDPOL in cooperation with , CP/RAC, REMPEC AND SPA/RAC	Report on the implementation of the Regional Plan		Secretariat
39.		Direct cooperation of Contracting Parties, with assistance of the MEDPOL or competent international and regional organizations, to address trans-boundary marine litter cases	As appropriate	Contracting Parties with assistance of the MEDPOL	Report sent to Secretariat		Contracting Parties
40.	<b>Art. 19 – Reporting</b>	National biennial reports on the implementation of the Regional Plan	Biennially	Contracting Party, in consultation with MEDPOL	Report issued		Contracting Party
41.		Regional report on the implementation of the Regional Plan	Biennially	MEDPOL, CP/RAC, REMPEC, SPA/RAC,	Report issued		Secretariat

				in consultation with regional and international organizations			
42.		Review the status of the implementation of the Regional Plan	Biennially	MEDPOL, CP/RAC, REMPEC, SPA/RAC, in consultation with regional and international organizations	Report issued		Secretariat

## Appendix 2<sup>11</sup>

### Potential research topics

Development and implementation of assessment and monitoring, as well as implementation of measures in the framework of this Regional Plan shall require scientific cooperation among parties involved. Due to complexity of marine litter management there are quite a number of topics that require further research. In the list below are presented some of the potential research topics:

#### SOURCES, DISTRIBUTION AND COMPOSITION

- Identification (size, type, possible impact) and evaluation of accumulation areas (closed bays, gyres, canyons, and specific deep sea zones) and sources of litter, including maritime transport (how, why and by whom litter is disposed of from shipping and the types of ships involved), industrial, agricultural and urban activities, rivers and diffuse inputs. Develop GIS and mapping systems to locate these.
- Evaluation of the quantity and localization of lost fishing gears.

#### DEGRADATION

- Evaluation of rates of degradation of different types of litter (plastics, degradable materials, bio plastics, etc.) and related leachability of pollutants.
- Support research on new materials (total degradation in the environment).

#### MICROLITTER

- Identification of main sources (industrial pellets and personal hygiene products related micro litter particles).
- Define harm for micro litter to establish potential physical and chemical impacts on wildlife, marine living resources and the food chain.

#### MODELLING

- Development of comprehensive modelling tools for the evaluation and identification of sources and fate of litter in the marine environment (including the identification of the accumulation areas and/or impacted by accidental inputs, and estimating residence time).

#### IMPACTS/EFFECTS

- Effects (lethal or sub lethal) under different environmental conditions of entanglement in particular threatened and protected species.
- Understanding how litter ingested by marine organisms, in particular threatened and protected species, affects their physiological condition and chemical burdens, reduce survival and reproductive performance and ultimately affect their populations or communities.
- Evaluation of the potential loss of fish stocks due to abandoned / lost fishing gears.
- Development of impact indicators (aesthetic impact, effects on fauna, flora and human health).
- Evaluation of the risk for transportation of invasive species.

#### COSTS

- Evaluation of direct costs and loss of income to tourism and fishery (incomes and stock losses, including protected/endangered species).
- Evaluation of costs due to clogging of rivers, coastal power plant cooling systems and/or wastewater purification systems.

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<sup>11</sup> Pending decision by the MEDPOL FP meeting in June 2013.

- Effectiveness of market based instruments related to marine litter.
- Development of common methodologies to evaluate the costs of removal (collection and elimination of marine litter).

#### EDUCATION / SENSIBILISATION

- Evaluate the effectiveness of programs of education and sensibilisation on beach cleanliness.

#### MONITORING

- Support the rationalisation of monitoring (common and comparable monitoring approaches, standards/baselines, intercalibration, data management system and analysis / quality insurance).
- Develop an ecological Quality Objective (ECOQ) for ingestion of litter in indicator species suitable for monitoring (sea turtles).
- Facilitate the harmonization of monitoring protocols for Baltic Sea, Black Sea, Mediterranean Sea and NE Atlantic.
- Develop monitoring and prevention systems for massive and accidental inputs of litter in the marine environment.

#### SOCIAL

- Development of common methodologies to collect social and economic data.
- Assessment of socially acceptable levels of marine litter to the public and industry.
- Development of an indicator for the aesthetic impact of litter.

#### MEASURES

- Develop tools to assess the effectiveness of measures intended to reduce the amount of marine litter.
- Identification of accumulation areas of importance.
- Ranking of the ports to be equipped in priority with port reception facilities taking into consideration the Mediterranean maritime traffic.
- Share the collection and elimination of transborder marine litter, including the intervention in case of critical situation.

#### LAW/ INSTITUTIONAL

- Compare and harmonize national Mediterranean systems (jurisdictional measures and institutional structures) with other conventions to support management schemes dedicated to marine litter.



## Appendix 3<sup>12</sup>

### Elements for National Biennial Reports

The Regional Plan on Marine Litter Management in the Mediterranean is requesting Contracting Parties to report biennially on:

- Implementation of the measures; and
- Implementation of the National Marine Litter Monitoring Programme.

Report on the Implementation of the measures

The Secretariat shall prepare by the end of 2014 Guidelines on the structure, content and reporting of the National Action Plan on Marine Litter, as well as a set of indicators. Main elements of national reports shall be:

- Policy, legal instruments and institutional arrangements including the National Action Plan;
- National and local measures to prevent and reduce generation of marine litter;
- Programmes of removal and disposal of existing marine litter;
- National marine litter monitoring programmes (summary report);
- Enhancement of public awareness and education;
- Stakeholder participation;
- Assessment of the effectiveness of the implementation of the measures; and
- Difficulties in the implementation of measures encountered.

Report on the Implementation of the National Marine Litter Monitoring Programme

The Secretariat shall prepare by the end of 2014 Guidelines for the preparation of the National Marine Litter Monitoring Programme. Main elements of national reports shall be:

- Structure and content of the monitoring programme;
- Survey and monitoring locations, stations, parameters, indicators, frequency, etc.;
- Responsible institution and participating institutions;
- Beach litter assessment results;
- Benthic litter assessment results;
- Floating litter assessment results;
- Effectiveness in the implementation of the National Marine Litter Monitoring Programme; and
- Difficulties in the implementation of the National Monitoring Programme.

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<sup>12</sup> Pending decision by the MEDPOL FP meeting in June 2013.