



## United Nations Environment Programme



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#### **MEDITERRANEAN ACTION PLAN**

Meeting of the MAP Focal Points

Athens, Greece, 10-12 September 2013

Draft Decision on the Draft Regional Plan on Marine Litter Management

#### Note by the Secretariat

The 17<sup>th</sup> meeting of the Contracting Parties held in Paris 2012, requested the MEDPOL programme, in close collaboration with the Contracting Parties and in cooperation with the MAP components and partners to prepare a Regional Plan on marine Litter management in the framework of Article 15 of the LBS Protocol.

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

The draft Regional Plan was reviewed in depth by an expert meeting designated by the Contracting Parties held on 17-18 May 2013, Barcelona, Spain as well as the MED POL Focal Points meeting held on 18-21 June 2013, Barcelona Spain. CP/RAC focal points meeting also reviewed the parts of the draft Regional Plan related to prevention measures.

The legal basis for the preparation of the Regional Plan is:

- 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):
- Several legal obligations of the Protocols of the Barcelona Convention related to marine litter and the relevant work carried out within this framework; 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 EU, Baltic Sea, Black Sea and North 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 and to national measures.

The proposed Regional Plan has been designed to address major challenges through a set of 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 depth at national and regional level.

At the request of the MEDPOL Focal points meeting, the Secretariat based on literature and some cost estimations provided by Israel and France has made a calculation of indicative costs of implementation of the Regional Plan. This indicative estimation is presented in Annex II of the Decision.

#### It has to be noted that:

- (i) Total estimated cost of the implementation of the Work Plan for tasks at regional and national level, for which estimation was done at present is € 4,527,000. For a number of tasks input by countries is required to take into account country specificities;
- (ii) For number of tasks in depth cost estimations will be done in the framework of the revised LBS National Action Plans in order to account investment needs according to the specificities in each country;
- (iii) For the tasks envisaged to be implemented during 2014-2015 biennium by the Secretariat and the Contracting parties, the total cost is estimated at Euros 496K out of which 220K is envisaged in the programme budget for 2014-2105 under MTF and Secured external resources (ECAP project). All Secretariat tasks are covered by this amount.

#### **Draft Decision**

## Draft Regional Plan on Marine Litter Management in the Mediterranean in the Framework of Article 15 of the Land Based Sources Protocol

The 18th Meeting of the Contracting Parties,

Recalling Article 5 of the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-based Sources and Activities adopted in 1996, hereinafter referred to as the LBS Protocol, concerning elaboration and implementation of national and regional action plans and programmes for elimination of pollution deriving from land-based sources,

Recalling Article 15 of the LBS Protocol concerning regional action plans and programmes containing measures and timetables for their implementation, as well as the annex 1 section C, point 14 of the same Protocol,

Taking into account Decision IG.20/10 of the 17th Meeting of the Contracting Parties (Paris, France, February 2012) entitled "Adoption of the Strategic Framework for Marine Litter management", as well as the 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),

Recalling the UNEP Global Marine Litter Initiative that took an active lead in assisting twelve Regional Seas Programmes in organizing and implementing regional activities on marine litter,

Recalling the results of 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,

Noting that marine litter has become a global and regional issue affecting marine and coastal environment quality as well as the important knowledge gaps on marine litter sources and impacts in the Mediterranean marine and coastal environment,

Highlighting the need to carry out focused scientific research to fill knowledge gap and support the implementation of required measures,

Taking into account the work carried out within the framework of United Nations Environment Programme and the pertinent provisions of the relevant international environmental agreements and other regional agreements of relevance,

Taking also into account the legal obligations with regard to marine litter and the relevant work carried out in this field within the framework of the UNEP/MAP Barcelona Convention and its associated Protocols.

Taking note of the 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),

Taking note of the 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, the UNEP/GPA Programme of Work on marine litter adopted in January 2012, as well as the International Conference on Prevention and Management of Marine Litter in European Seas, Berlin, 10-12 April 2013,

Being Inspired by the progress of the work carried out by UNEP/MAP to implement the Ecosystem Approach Roadmap with a particular focus on the commonly agreed ecological objectives, operational objectives, indicators, good environmental status and respective targets with regards to marine litter and the need to fully streamline their application on marine litter management, as well as the need to fully harmonise implementation of this Plan with the Mediterranean Ecosystems Approach (EcAp) cycle,

Referring to the Report of the Meeting of the MEDPOL Focal points held in Joint Session with CP/RAC Focal points on 18-21 June 2013 in Barcelona, Spain,

Committed to increased efforts to tackle the regional challenges for the management of marine litter in an efficient and effective way to achieve good environmental status in synergy with EU Marine Strategy Framework Directive and in harmony with the other European Regional Seas,

#### Decides to:

**Adopt** the Regional Plan on Marine Litter Management in the Mediterranean in the framework of Articles 5 and 15 of the LBS Protocol hereinafter referred to as the Regional Plan, which is contained in Annex to this decision;

Adopt the following Annexes to this Decision:

- (a) Annex 2 "Work Plan with timetable for the implementation of relevant Articles of Marine Litter Regional Plan" to guide and facilitate the work of the Secretariat and the Contracting Parties on priority measures with regards to the implementation of the Regional Plan and mobilize external resources for this purpose, as appropriate;
- (b) Annex 3 "Potential Research Topics" to promote and support scientific research by the Contracting Parties and scientific community to fill the knowledge gaps on marine litter sources and impacts as well as to support implementation of relevant measures; and.
- (c) Annex 4 "Elements for National Biennial Reports" to enhance reporting on the implementation and effectiveness of measures.

**Urge** the Contracting Parties to take the necessary financial, legal, administrative and other measures to ensure the implementation of this Regional Plan and to report on their progress to the Secretariat in accordance with its Article 19;

**Urge** the Contracting Parties, intergovernmental organizations, donor agencies, industry, non-governmental organizations and academic institutions to support the implementation of the Regional Plan providing sufficient financial, technical and scientific contribution, including the implementation of country-based measures and projects, as well as by joining as appropriate to and taking advantage from the marine litter global partnership established in the framework of UNEP/Global Programme of Action;

*Urge* the Union for the Mediterranean and its Horizon 2020 initiative to strongly support the development and implementation of necessary investment projects by the Contracting Parties with the view to establish sound and sustainable solid waste management systems in accordance with the relevant measures provided for in the Regional Plan;

**Request** the Secretariat to provide, upon request and subject to availability of funds, the necessary assistance to, and organize capacity building programmes for, the Contracting Parties for the implementation of the Regional Plan.

#### ANNEX I

## Draft Regional Plan on Marine Litter Management in the Mediterranean in the Framework of Article 15 of the Land Based Sources Protocol

#### Part I - General provisions

#### Article 1

#### Rationale for the Regional Plan

Marine litter may have 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, general lack of understanding of the public's co-responsibility, and the optimisation of the application of legal enforcement systems could limit pollution.

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.

#### **Article 2**

#### Area and Scope of application

The area to which this Regional Plan applies is the area defined in Art. 3<sup>1</sup> of the LBS Protocol paragraphs (a), (c), and (d). The Regional Plan shall apply to discharges referred to in Article 4 (a)<sup>2</sup> of the LBS Protocol and any operational discharge from ships, platforms and other man-made structures at sea.

The area to which this Protocol applies (hereinafter referred to as the "Protocol Area") shall be:

<sup>&</sup>lt;sup>1</sup> Article 3 of the LBS Protocol: Protocol Area

<sup>(</sup>a) The Mediterranean Sea Area as defined in article 1 of the Convention:

<sup>(</sup>c) Waters on the landward side of the baselines from which the breadth of the territorial sea is measured and extending, in the case of watercourses, up to the freshwater limit;

<sup>(</sup>d) Brackish waters, coastal salt waters including marshes and coastal lagoons, and ground waters communicating with the Mediterranean Sea.

<sup>&</sup>lt;sup>2</sup> Article 4 of the LBS Protocol Application

<sup>1.</sup> This Protocol shall apply: (a) To discharges originating from land-based point and diffuse sources and activities within the territories of the Contracting Parties that may affect directly or indirectly the Mediterranean Sea Area. These discharges shall include those which reach the Mediterranean Area, as defined in article 3(a), (c) and (d) of this Protocol, through coastal disposals, rivers, outfalls, canals, or other watercourses, including ground water flow, or through run-off and disposal under the seabed with access from land;

#### **Definition of terms**

For the purpose of this Regional Plan:

*Marine litter*<sup>3</sup>, 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.

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 by using environmentally respectful methods;
- (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;

<sup>&</sup>lt;sup>3</sup> [This definition doesn't cover the chemical and radioactive contaminants as well as the discharges from military activities]

- (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.

#### **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 best effort that the measures provided for in Articles 7 to 10 are implemented, as specified in the respective articles, in a coherent manner to achieve good environmental status and relevant targets on marine litter. Various actors shall be involved in the development and implementation of agreed measures as provided for in Article 17.

#### Article 7

#### Integration of marine litter measures into the LBS National Action Plans (LBS NAPs)

- 1. The Contracting Parties in accordance with Article 5 of the LBS Protocol shall elaborate and implement, individually or jointly, as appropriate, national and regional action plans and programmes, containing measures and time tables for their implementation. In doing so the Contracting Parties shall consider updating by the year 2015 the LBS NAPs to integrate marine litter in accordance with the provisions of this Regional Plan and other means to perform their obligations. To this aim, the expert working group 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) Measures to prevent and reduce marine litter;
- (d) Programmes of removal and environmentally sound disposal of existing marine litter according to the national legislation about management of this kind of waste; and
- (e) Awareness raising and education programmes.

#### Legal and institutional aspects

- 1. For the purpose of implementing the Regional Plan, the Contracting Parties shall adopt as appropriate the necessary 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 endeavour to ensure:
  - Institutional coordination, where necessary, among the relevant national policy bodies and relevant regional organisations and programmes, in order to promote integration; and
  - (b) Close coordination and collaboration between national regional and local authorities in the field of marine litter management.
- 3. The Contracting Parties shall give due consideration to the implementation of the relevant related provisions of the Protocols<sup>4</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

 By the year 2025 at latest, to base urban solid waste management on reduction at source, applying the following waste hierarchy as a priority order in waste prevention and management legislation and policy: prevention, preparing for re-use, recycling, other recovery, e.g. energy recovery and environmentally sound disposal.

<sup>&</sup>lt;sup>4</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.

- 2. By the year 2019 implement adequate waste reducing/reusing/recycling measures in order to reduce the fraction of plastic packaging waste that goes to landfill or incineration without energy recovery.
- 3. By the year 2017 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 with long durability 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 as well as selling dry food or cleaning products in bulk and refill special and reusable containers;
  - (d) Fiscal and economic instruments to promote the reduction of plastic bag consumption;
  - (e) Establishment of [mandatory] Deposits, Return and Restoration System for expandable polystyrene boxes in the fishing sector;
  - (f) Establishment of [mandatory] Deposits, Return and Restoration System for beverage packaging prioritizing when possible their recycling; and
  - (g) Establish procedures and manufacturing methodologies together with plastic industry, in order to minimize the decomposition characteristics of plastic, to reduce microplastic.
- 4. By the year 2020 [2025] take necessary measures to establish as appropriate 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 by the year 2017 the "Fishing for Litter" environmentally sound practices, 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 by the year 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.

<sup>&</sup>lt;sup>5</sup> International Convention for the Prevention of Pollution from Ships.

- 8. Apply by the year 2020 the cost effective measures to prevent any marine littering from dredging activities taking into account the relevant guidelines adopted in the framework of Dumping Protocol of the Barcelona Convention.
- The Contracting Parties shall take the necessary measures by the year 2020 to close to the extent possible the existing illegal dump sites on land [illegal landfills] in the area of the application of the Regional Plan.
- 10. The Contracting Parties shall take enforcement measures to combat 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.

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

The Contracting Parties shall, where it is environmentally sound and cost effective, remove existing accumulated litter, subject to Environmental Impact Assessment procedure, in particular from specially protected areas and Specially Protected Areas of Mediterranean Importance (SPAMI) 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 the following measures by the year 2019:

- (a) Identify in collaboration with relevant stakeholders accumulations/hotspots of marine litter and implement 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 environmentally sound practices, in consultation with the competent international and regional organizations and in partnership with fishermen and ensure adequate collection, sorting, recycling and/or 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.

<sup>&</sup>lt;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 UNEP(DEPI) MED WG 387Inf.14".

#### Part III - Assessment

#### Article 11

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

- 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 coordinated and, if possible, common agreed methodologies, national monitoring programmes and surveys.
- 2. The Secretariat shall prepare the Assessment 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, using 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 based on the existing information shall be submitted to the meeting of the Contracting Parties two 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 Contracting Parties, on the basis of the proposals of the Secretariat shall:
  - (a) Prepare by the year [2014] [2015] the Regional Marine Litter Monitoring Programme, as part of the integrated regional monitoring programme;
  - (b) Establish in the year 2016 the Regional Data Bank on Marine Litter; and
  - (c) Establish by the year 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 the year 2017 National Monitoring Programme on Marine Litter.
- 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 the year 2014 the Guidelines for the preparation of the National Marine Litter Monitoring Programmes.

# 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.

#### 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 to 10 and 12 of the Regional Plan, technical assistance, transfer of knowhow and technology shall be provided, including capacity building, by the Secretariat to the Contracting Parties in need of assistance.

#### 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 synergy with existing initiatives in the field of education for sustainable development and environment and 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 may encourage appropriate involvement of various stakeholders including local authorities, civil society, private sector (producers, garbage collection and treatment companies, etc.) and other stakeholders as appropriate:

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

#### 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 and data resulting from monitoring programme as provided for in Article 12 of this 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.

**Annex II** 

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

	Article	Task	Timetable	Lead Authority	Verification indicator	Estimated cost (€)	Financial source
PART	II - MEASURES	AND OPERATIONAL TARG	GETS				
1.	Art. 7 - Integration of marine litter measures into	Update the existing LBS National Action Plan guidelines	2014	MEDPOL, in consultation with regional and international organizations	Guidelines sent to Contracting Parties	40K. <sup>7</sup> (Includes task 3)	Secretariat
2.	National Action Plans (LBS NAPs)	Update the existing LBS National Action Plans to integrate marine litter in accordance with the provisions of the Regional Plan National Stakeholder Workshop and consultancy	2015	Contracting Party, in consultation with MEDPOL	Updated LBS National Action Plan sent to the Secretariat	210.8 (Total for 21 countries)	Contracting Party
3.		Development of reporting format	2014	MEDPOL, in consultation with regional and international organizations	Reporting format sent to countries	Cost included in task 1	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	21K <sup>9</sup> . (Total for 21 countries)	Contracting Party

Includes consultancy and cost of the Regional meeting of experts. This amount covers also task 3.
 It is suggested that each country assigns at least 10K for the implementation of this task.
 It is estimated that each country will spend up to 1K for the preparation of the National report.

5.	Art. 9 – Prevention of marine litter	To base urban solid waste management on reduction at source, applying the following waste hierarchy as a priority order in waste prevention and management legislation and policy: prevention, preparing for re-use, recycling, other recovery, e.g. energy recovery and environmentally sound disposal.	2025	Contracting Party, in cooperation with the CP/RAC and MED POL	Report sent to Secretariat	Cost to be specified in the updated LBS National Action Plan of each country. CP/RAC and MEDPOL to provide guidance to countries to make estimates	Contracting Party
6.		Implement adequate waste reducing/reusing/ recycling measures in order to reduce the fraction of plastic packaging waste that goes to landfill or incineration without energy recovery.	2019	Contracting Party, in cooperation with CP/RAC	Report sent to Secretariat	Cost to be specified in the updated LBS National Action Plan of each country. CP/RAC to provide guidance to countries to make estimates	Contracting Party
7.		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 lifecycle of the product with measures prioritizing the hierarchy of waste management in order to encourage companies to design products with long durability for reuse, recycling	2017	Contracting Party, in cooperation with CP/RAC	Report sent to Secretariat	Cost to be specified in the updated LBS National Action Plan of each country. CP/RAC to provide guidance to countries to make estimates	Contracting Party

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	and materials reduction in weight and toxicity					
8.	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	Cost to be specified in the updated LBS National Action Plan of each country. CP/RAC to provide guidance to countries to make estimates	Contracting Party
9.	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 as well as selling dry food or cleaning products in bulk and refill special and reusable containers	2017	Contracting Party, in cooperation with CP/RAC	Report sent to Secretariat	Cost to be specified in the updated LBS National Action Plan of each country. CP/RAC to provide guidance to countries to make estimates	Contracting Party
10.	Explore and implement to the extent possible prevention measures related to fiscal and economic instruments to promote the reduction of plastic bag consumption	2017	Contracting Party, in cooperation with CP/RAC	Report sent to Secretariat	Cost to be specified in the updated LBS National Action Plan of each country. CP/RAC to provide guidance to countries to make estimates	Contracting Party
11.	Explore and implement to the extent possible prevention measures related to establishment of [mandatory] Deposits, Return and	2017	Contracting Party, in cooperation with CP/RAC	Report sent to Secretariat	Cost to be specified in the updated LBS National Action	Contracting Party

	Restoration System for expandable polystyrene boxes in the fishing sector				Plan of each country. CP/RAC to provide guidance to countries to make estimates	
12.	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 recycling	2017	Contracting Party, in cooperation with CP/RAC	Report sent to Secretariat	Cost to be specified in the updated LBS National Action Plan of each country. CP/RAC to provide guidance to countries to make estimates	Contracting Party
13.	Explore and implement to the extent possible prevention measures related to establishment of procedures and manufacturing methodologies together with plastic industry, in order to minimize the decomposition characteristics of plastic, to reduce microplastic	2017	Contracting Party, in cooperation with CP/RAC	Report sent to Secretariat	Cost to be specified in the updated LBS National Action Plan of each country. CP/RAC to provide guidance to countries to make estimates	Contracting Party
14.	Take necessary measures to establish as appropriate 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	Cost to be specified in the updated LBS National Action Plan of each country. MEDPOL to provide guidance to countries to make estimates	Contracting Party

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15.	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	REMPEC to provide guidance to countries to make estimates	Contracting Party
16.	Explore and implement to the extent possible the "Fishing for Litter" environmentally sound practices, 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	2017	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat	42K <sup>10</sup> (Amount to be shared with task 26). MEDPOL to provide guidance to countries to make estimates	Contracting Party
17.	Explore and implement to the extent possible "Gear marking to indicate	2017	Contracting Party, in cooperation with	Report sent to Secretariat	42K <sup>11</sup> MEDPOL to	Contracting Party

<sup>&</sup>lt;sup>10</sup> It is suggested that each country assigns at least 2K for the implementation of this task. Suggested amount is based on information from the literature and covers only institutional part of the task and does not cover the system to be established, regulation to be created and awareness campaigns.

<sup>&</sup>lt;sup>11</sup> It is suggested that each country assigns at least 2K for the implementation of this task. Suggested amount is based on information from the literature and covers only institutional part of the task and does not cover the system to be established, regulation to be created and awareness campaigns.

	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		MEDPOL		provide guidance to countries to make estimates	
18.		2020	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat	Estimate cannot be done without input from countries. The monitoring cost that depends on the specificity of each country should be taken into account.  MEDPOL to provide guidance to countries to make estimates	Contracting Party
19.	Take the necessary measures to close to the extent possible the existing illegal dump sites on land [illegal landfills] in the area of the application of the Regional Plan	2020	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat	Estimate cannot be done without input from countries. MEDPOL to provide guidance to countries to make estimates	Contracting Party
20.	Take enforcement measures to combat illegal dumping in accordance with national legislation including littering on the beach, illegal sewage		Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat	Estimate cannot be done without input from countries. MEDPOL to	Contracting Party

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		disposal in the coastal zone and rivers in the area of the application of the Regional Plan				provide guidance to countries to make estimates This task is related to tasks 5 and 6	
21.	Art. 10 – Removing existing marine litter and its environmenta lly sound disposal	Where it is environmentally sound and cost effective, remove existing accumulated litter, subject to EIA procedure, in particular from specially protected areas and Specially Protected Areas of Mediterranean Importance (SPAMI) and litter impacting endangered species listed in Annexes II and III of the SPA and Biodiversity Protocol	2019	Contracting Party, in cooperation with MEDPOL and SPA/RAC	Report sent to Secretariat	630K <sup>12</sup> MEDPOL and SPA/RAC to provide guidance to countries to make estimates	Contracting Party
22.		Explore and implement to the extent possible the identification in collaboration with relevant stakeholders accumulations / hotspots of marine litter and implementation of national programmes on their regular removal and sound disposal	2019	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat	630K <sup>13</sup> MEDPOL to provide guidance to countries to make estimates	Contracting Party
23.		Explore and implement to the extent possible the implementation of the National Marine Litter Cleanup Campaigns on a regular basis	2019	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat	630K <sup>14</sup> MEDPOL to provide guidance to countries to make estimates. Amount to be shared between	Contracting Party

<sup>12</sup> It is suggested that each country assigns at least 30K for the implementation of this task.
13 It is suggested that each country assigns at least 30K for the implementation of this task.
14 It is suggested that each country assigns at least 30K for the implementation of tasks 23 and 24.

					tasks 23 and 24	
24.	Explore and implement to the extent possible the participation in International Coastal Cleanup Campaigns and Programmes	2019	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat	MEDPOL to provide guidance to countries to make estimates. Amount assigned for task 23 to be shared with this task.	Contracting Party
25.	Explore and implement to the extent possible the application as appropriate Adopt-a-Beach or similar practices and enhance public participation role with regard to marine litter management	2019	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat	420K <sup>15</sup> MEDPOL to provide guidance to countries to make estimates	Contracting Party
26.	Explore and implement to the extent possible the application of the Fishing for Litter practices, in consultation with the competent international and regional organizations and in partnership with fishermen and ensure adequate collection, sorting and/or environmentally sound disposal of the fished litter	2019	Contracting Party, in cooperation with MEDPOL	Report sent to Secretariat	MEDPOL to provide guidance to countries to make estimates. Amount assigned for task 16 to be shared with this task	Contracting Party
27.	Explore and implement to the extent possible charging reasonable costs for the use of port reception facilities or, when applicable application of No-Special-Fee system, in consultation with competent	2019	Contracting Party, in cooperation with REMPEC	Report sent to Secretariat	REMPEC to provide guidance to countries to make estimates	Contracting Party

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 $<sup>^{15}</sup>$  It is suggested that each country assigns at least 20K for the implementation of this task.

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		international and regional organizations when using port reception facilities for implementing the measures provided for in Article 10.					
PART I	II – ASSESSMEN	IT					
28.	Art. 11 – Assessment of marine litter in the Mediterranean	Assessment of marine litter in the Mediterranean	Every six years, first report 2 years after entry into force of the Regional Plan	MEDPOL	Report issued	40K (National and regional consultancy contracts)	Secretariat
29.	Art. 12 – Mediterranea n Marine	Establishment of an Expert Group on Regional Marine Litter Monitoring Programme	2014	MEDPOL	Expert Group established	20K One meeting annually	Secretariat
30.	Litter Monitoring Programme	Guidelines for the preparation of the National Marine Litter Monitoring Programmes, in collaboration with the relevant international and regional organizations	2014	MEDPOL, in consultation with regional and international organizations	Guidelines prepared	40K (To cover consultation meeting with partners and consultancies). Amount covers also task 31	Secretariat
31.		Preparation of the Regional Marine Litter Monitoring Programme, as part of the integrated regional monitoring programme	2014 [2015]	MEDPOL, in consultation with regional and international organizations	Regional Marine Litter Monitoring Programme prepared	Cost included in task 30	Secretariat
32.		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	2017	Contracting Party, in consultation with MEDPOL	Implementation started	210K <sup>16</sup> Cost of the Implementation of the National Monitoring Programmes is	Contracting Party

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 $<sup>^{16}</sup>$  It is suggested that each country assigns at least 10K for the implementation of this task.

		the LBS Protocol design National Monitoring Programme on Marine Litter				not included. MEDPOL to provide guidance to countries to make estimates	
33.		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	Included in task 32	Contracting Party
34.		Establishment of the Regional Data Bank on Marine Litter	2016	MEDPOL, in consultation with regional and international organizations	Data Bank established	250K. <sup>17</sup>	Secretariat
PART I	V - SUPPORT TO	IMPLEMENTATION					
35.	Art. 13 – Research topics and scientific cooperation	Assistance for scientific cooperation	As appropriate	MEDPOL, CP/RAC, REMPEC, SPA/RAC, in consultation with regional and international organizations	Assistance provided	50K from MEDPOL. Seed money to mobilize external resources	Secretariat

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 $<sup>^{</sup>m 17}$  Cost of equipment, software and staff.

36.	Art. 14 – Specific guidelines	Preparation of specific guidelines for measures listed in Articles 9 and 10 of the Regional Plan	By 2016/2017	MEDPOL, CP/RAC, REMPEC, SPA/RAC, in consultation with regional and international organizations	Guidelines published	280 K <sup>18</sup>	Secretariat
37.	Art. 15 - Technical assistance	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	10K from MEDPOL. CP/RAC 280k for capacity building Estimated cost to be provided by REMPEC and SPA/RAC	Secretariat
38.	Art. 16 – Enhancement of public awareness and education	Undertaking, where appropriate in synergy with existing initiatives in the field of education for sustainable development and in partnership with civil society, public awareness and education activities with adequate duration and follow up, with regard to marine litter	As appropriate	Contracting Party, in consultation with MEDPOL	Report sent to Secretariat	420K <sup>19</sup> MEDPOL to provide guidance to countries to make estimates	Contracting Party

<sup>18</sup> 120 K for MEDPOL and 160-for CP/RAC . CP/RAC will prepare the following:

- 1. Sustainable management and prevention measures of urban solid waste treatment according to waste hierarchy
- 2. Plastic waste minimization
- 3. Implementation of Extended Producer Responsibilities measures
- 4. Implementation of Green Public Procurement
- 5. Measures for the minimization of consumption of plastic bags
- 6. Measures for implementation of DRRS for EPS boxes in the fishing sector
- 7. Measures for implementation of DRRS for beverage packaging
- 8. In collaboration with plastic producers, design measures for the reduction of the environmental impact of the degradation of plastic in the marine environment

		management including activities related to prevention and promotion of sustainable consumption and production					
39.	Art. 17 – Major groups and stakeholder participation	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	Contracting Party, in consultation with MEDPOL	Report sent to Secretariat	420K <sup>20</sup> MEDPOL to provide guidance to countries to make estimates	Contracting Party
40.	Art. 18 – Regional and international cooperation	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 And other regional partners	Report on the implementation of the Regional Plan by the Secretariat	10K from MEDPOL. Estimated costs to be provided by CP/RAC, REMPEC and SPA/RAC	Secretariat
41.		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	210K <sup>21</sup> MEDPOL to provide guidance to countries to make estimates	Contracting Parties

 <sup>19</sup> It is suggested that each country assigns at least 20K for the implementation of this task.
 20 It is suggested that each country assigns at least 20K for the implementation of this task.
 21 It is suggested that each country assigns at least 10K for the implementation of this task and for emergencies.

42.	Reporting	National biennial reports on the implementation of the Regional Plan	Biennially	Contracting Party, in consultation with MEDPOL	Report issued	42K <sup>22</sup> MEDPOL to provide guidance to countries to make estimates	Contracting Party
43.		Regional report on the implementation of the Regional Plan	Biennially	MEDPOL, CP/RAC, REMPEC, SPA/RAC, in consultation with regional and international organizations	Report issued	20K <sup>23</sup> .	Secretariat
44.		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	Included in task 43	Secretariat

#### Note:

- (i) Total estimated cost of the implementation of the Work Plan for tasks for which estimation was done at present is € 4,967,000, but on number of tasks input by countries is still needed. Such inputs will be based on country specificities;
- (ii) For number of tasks recommendations will be done in the revised LBS National Action Plans in order to account for specificities in each country;
- (iii) Cost of the implementation of national monitoring programmes on marine litter is not part of this Work Plan.

 $<sup>^{22}</sup>$  It is suggested that each country assigns at least 2K for the implementation of this task

<sup>&</sup>lt;sup>23</sup> Consultancy contract to include also task 44.

#### **ANNEX III**

#### 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.
- Define adequate indicators for the Mediterranean to assess the micro litter problem and its effects.

#### **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.

- 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, inter-calibration, 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 trans-boundary marine litter, including the intervention in case of critical situation.

#### LAW/ INSTITUTIONNAL

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

#### **ANNEX IV**

#### **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.