



**United Nations Environment Programme
Coordinating Unit for the Mediterranean Action Plan**



Programme des Nations Unies pour l'environnement
Unité de coordination du Plan d'action pour la Méditerranée

**SUPPORT TO THE BARCELONA CONVENTION FOR THE
IMPLEMENTATION OF THE ECOSYSTEM APPROACH, INCLUDING THE
ESTABLISHMENT OF MPAs IN OPEN SEAS AREAS, INCLUDING DEEP
SEA**

Contribution Agreement N°21.0401/2008/519114/SUB/D2

FINAL REPORT – APRIL 2012

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“Support to the Barcelona Convention for the Implementation of the Ecosystem Approach, including the establishment of MPAs in open sea areas, including deep sea”

Final Report January 2009- December 2011

1. Summary and Context of the Project

The Contracting Parties to the Barcelona Convention, at their 15th meeting held in January 2008, Almeria, Spain, decided that UNEP/MAP should gradually implement the ecosystem approach in view of an ecological vision for the Mediterranean as “a healthy Mediterranean with marine and coastal ecosystems that are productive and biologically diverse for the benefit of present and future generations”. (Decision IG 17/6). For this purpose, the Contracting Parties at the same meeting adopted the ecosystem approach roadmap, the vision and strategic goals and established a governmental designated expert group (GDE) with the mandate to guide the work of UNEP/MAP in this respect.

The 2008 Almeria Environmental Ministerial Declaration urged the Contracting Parties to the Barcelona Convention and the SPA and Biodiversity Protocol to undertake measures for establishing a comprehensive and coherent Mediterranean network of coastal and marine protected areas by 2012. The 2009 Marrakesh Ministerial Declaration of the 16th Meeting of the Contracting Parties called on Mediterranean Coastal States to continue the establishment of marine protected areas and to pursue the protection of biodiversity with a view to the establishment by 2012 of a network of marine protected areas, including on the high seas, in accordance with the relevant international legal framework and the objectives of the World Summit on Sustainable Development.

In addition, Decision IG.17/6 outlines a roadmap for the implementation of the ecosystem approach. The roadmap consists of several subsequent steps, which in addition to the vision and strategic goals, provide for undertaking of an assessment of marine and coastal properties and pressures including a socio economic analysis, development of ecological objectives, operational objectives and respective indicators, development of good environmental status and targets, the monitoring programmes that takes into account the agreed EA indicators, as appropriate and finally to undertake the necessary management measures and programmes to achieve Good Environmental Status. Moreover, the UNEP/MAP – Barcelona Convention 5 year Programme of Work adopted at the Contracting Parties meeting in Marrakesh in 2009, considers ECAP as its over-arching priority cutting across its six thematic areas.

After the completion of this Project in December 2011, at their 17th Meeting of Contracting Parties (COP 17) held in Paris from 8 to 10 February 2012 the Parties have taken note of the progress made and have further emphasized the priority nature of all ECAP related activities for all MAP Components during 2012 and 2013 and mandated the update of a number of MAP regional sectorial policies as provided for in the 5 year strategic programme of work of MAP, thus giving an excellent opportunity to take into account as appropriate the results of ecosystem approach implementation in their revision, as well as to harmonize their implementation within the ECAP concept. In particular, Decision 20/4 on “Implementing the Ecosystems Approach Roadmap” validated the work done so far in the context of this project with regard to the 11 ecological objectives, operational objectives and indicators for the Mediterranean which is aligned with the work under the EU MSFD and other related EU legislation.

Building on the work undertaken under this project, the 17th Contracting Parties also adopted the timeline for implementing the ecosystem approach until 2019 and established a six-year cyclic review process of its implementation. With regard to future actions the 17th Contracting Parties meeting mandated the Secretariat to mobilize its full capacity with the support of MEDPOL and the Regional Activity Centers to prepare an integrated monitoring programme based on the agreed ecosystem approach indicators, work on the determination of Mediterranean Good Environmental Status (GES) and targets, prepare an in-depth socio-economic analysis, develop a MAP-Barcelona Convention policy on assessments in the framework of the implementation of the ECAP, and in summary, to consider the work carried out for the implementation of the Ecosystem Approach by all MAP components where appropriate; and align the work to EU common MSFD implementation strategy.

The project that facilitated this progress was based on the explained political and legal considerations. In this context and in accordance with UNEP/MAP programme of work adopted by the Contracting Parties in 2008, the European Commission funded the project "Support to the Barcelona Convention for the Implementation of the Ecosystem Approach, including the establishment of MPAs in open sea areas, including deep sea". The objectives of the project are to:

- *Promote and enhance the implementation of the ecosystem approach road map to the management of human activities in the Mediterranean;*
- *Facilitate the establishment, by the Contracting Parties to the Barcelona Convention of Specially Protected Areas of Mediterranean Importance to protect habitats of conservation interest located in protected areas in open seas and deep sea habitats; and,*
- *Ensure coherence to the extent possible with EU Marine Strategy Framework Directive.*

The project contained two components:

1. *Further implementing the Ecosystem Approach within the Barcelona Convention through the following key actions:*
 - a) Identification of important ecosystem properties and assessment of ecological status and pressures;
 - b) Undertaking a socio-economic analysis of ecosystem goods and services;
 - c) Developing a set of ecological and operational objectives with indicators and target levels; and,
 - d) Organizing a regional meeting of Government Designated Experts to consider and review the results of the project.
2. *Identifying and preparing the nomination of Specially Protected Areas of Mediterranean Importance (SPAMI) by the meeting of the Contracting Parties the Barcelona Convention/Mediterranean Action Plan, through the following key actions:*
 - a) Undertaking legal analysis about the status of each of the selected areas and data collection including field survey;
 - b) Elaborating the draft SPAMI presentation reports; and,
 - c) Holding consultation meetings to review and finalize the presentation reports.

The Contribution Agreement (N°21.0401/2008/519114/SUB/D2) was signed on 19 December 2008 between the European Community and the Coordinating Unit for the Mediterranean Action Plan of the United Nations Environment Programme (UNEP/MAP). Until November 2009, the Secretariat work focused on the internal planning and coordination for project

implementation, preparation of terms of reference for different assignments such as consultancy for preparing the sub regional reports on pollution, sub regional reports on biodiversity, national reports on biodiversity, consultancy to assist in coordinating and managing the project, etc. Identification and recruitment of the sub regional, national and regional consultants, in total 9 and 21 national experts, was done. In addition, several internal brainstorming meetings were held due to the innovative and difficult character of the subject. Implementation of this project was addressed on priority basis at the Executive Coordination Panel (Directors of MAP components) meetings in December 2008, February 2009, May 2009. Although some delays were experienced in the startup of the project, the implementation of the project substantively advanced in particular after the Meeting of the 16th Contracting Parties, held in Marrakesh (Morocco) in November 2009.

After the COP 16, the Project activities speeded up and the below-listed outcomes were achieved:

- The Integrated Assessment of the Mediterranean Ecosystem which was peer reviewed by countries and GESAMP;
- The 11 Ecological Objectives and corresponding 28 operational objectives and 61 indicators; which are in line with the Marine Strategy Framework Directive, while being coherent with the Barcelona Convention and its Protocols; and,
- The ECAP timeline for the next 10 years fully aligned with the MSFD implementation process
- The steps taken for the establishment of protected areas in open seas have launched the process in 3 new areas beyond national jurisdiction in the Mediterranean and supported the agreement at the COP17 of a list of 13 EBSAs to be presented to CBD for inclusion in the CBD depository.

2. Activities carried out during the Project

2.1 Component 1: Ecosystem approach

The ecosystems approach is a strategy for the integrated management of land, water and living resources that promoted conservation and sustainable use in an equitable way. The Parties to the Barcelona Convention have engaged into a process to implement the ecosystems approach in the Mediterranean the ultimate objective of which is to influence the management of human activities.

UNEP/MAP Programme of work with regard to ecosystem approach (ECAP) is ambitious with the view to implementing the roadmap adopted by the Parties in 2008, through Decision IG 17/6 and an important vehicle for advancing the implementation of EU Marine Strategy Framework Directive (MSFD, 2008/56/EC). Contracting Parties decisions reflect the wish to strengthen cooperation and seek synergies with EU initiatives such as the Water framework Directive and the MSFD to achieve a shared vision of *“a healthy Mediterranean with marine and biological ecosystems that are productive and biologically diverse for the benefit of present and future generations”*.

Through Decision IG.17/6 the Contracting Parties to the Barcelona Convention have committed to progressively apply the Ecosystem Approach to the management of human activities with the goal of effecting real change in the Mediterranean marine and coastal environment. Parties agreed that the ecological vision of the Ecosystems Approach to be realized through the following strategic goals:

1. *To protect, allow recovery, and where practicable, restore the structure and function of marine and coastal ecosystems – thus also protecting marine biodiversity – in order to achieve and maintain good ecological status allowing for sustainable use.*
2. *To reduce pollution in the marine and coastal environment so as to ensure that there are no significant impacts or risks to human and/or ecosystem health and/or on the uses of the sea and the coasts.*
3. *To preserve, enhance, and restore a balance between human activities and natural resources in the sea and the coasts and reduce their vulnerability to risks.*

In addition, Decision IG.17/6 outlines a roadmap for the implementation of the ecosystem approach. The roadmap consists of several subsequent steps, which in addition to the vision and strategic goals, provide for undertaking of an assessment of marine and coastal properties and pressures including a socio economic analysis, development of ecological objectives, operational objectives and respective indicators, development of good environmental status and targets, the monitoring programmes that takes into account the agreed EA indicators, as appropriate and finally to undertake the necessary management measures and programmes to achieve Good Environmental Status. Moreover, the UNEP/MAP – Barcelona Convention 5 year Programme of Work adopted at the Contracting Parties meeting in Marrakesh in 2009, considers ECAP as its over-arching priority cutting across its six thematic areas.

i. Preparation of the assessment documents on ecological status and pressures and impacts based on the agreed Table of Contents

The integrated assessment report developed under this project was accepted by the Contracting Parties to Barcelona Convention, as the initial assessment to represent step 3 in the EA process: collating information on the overall nature of ecosystems in the Mediterranean, including physical and ecological characteristics, drivers and pressures that affect the state of the marine environment, conditions or state of the coastal and marine ecosystems, and expected response of ecosystems if trends continue, where feasible. The goals of the initial assessment were to define the major basin-wide priority issues to be addressed by the EA and to determine where information that is being gathered within UNEP/MAP-Barcelona Convention system, combined with published studies, could eventually suffice to elucidate management priorities. The converse of this goal is also important: determining where gaps exist, in order to improve scientific research and monitoring being undertaken by Mediterranean countries so as to provide an adequate foundation for effective and efficient ecosystem-based management going forward.

With a view to facilitating the assessment process, the Government Designated Experts (GDE) group decided in July 2008 to provisionally split the Mediterranean sea area into four and agreed on an “Assessment Table of Content” that would cover pollution and biodiversity, physic-chemical characteristics, hydrogeology and oceanographic parameters, as well as a study on the economic value of the Mediterranean marine ecosystems. The finding of the assessment would be used at a later stage to serve the implementation of the other steps of the ecosystem approach roadmap, namely to identify and develop a) the ecological objectives and the operational objectives with indicators and targets, which were also undertaken under this project.

The Integrated Assessment of the Mediterranean Sea Report¹ represents an initial assessment of information on ecology, status, and pressures affecting coastal and marine ecosystems of the Mediterranean, based on existing information available either at the

¹ http://195.97.36.231/acrobatfiles/11WG363_Inf21_Eng.pdf

regional level, or throughout each of the four sub-regions (the Western Mediterranean, the Central Mediterranean, the Adriatic and the Eastern Mediterranean) that were delineated by decision of the Contracting Parties to the Barcelona Convention. The assessment was prepared in line with the agreement at the First Meeting of Technical Experts on the Application of the Ecosystem Approach by MAP, in Rome 8-9 April 2010, which stipulated that the integrated report should follow the Table of Contents proposed and adopted by the Second meeting of Government Designated Experts on the Application of the Ecosystem Approach by MAP, in Athens 9-10 July 2008. In addition to a standard format for each of the sub-regions, the integrated report contains an Introduction that describes this initial assessment in the context of the ecosystem approach process, a basin-wide overview of what is currently known about pressures and states of marine and coastal ecosystems across the Mediterranean, and a concluding section identifying priority issues, as well as critical gaps in understanding that need to be filled in order to advance the Ecosystem Approach process.

While the integrated assessment was undertaken on the basis of four sub-regions, the overview of the sub-regions, taken together with a review of literature on Mediterranean ecology overall, suggests that commonalities may be more pervasive than are differences between sub-regions. Common to all regions is the recognition that certain coastal and marine habitats deliver extremely valuable ecosystem services that benefit all Mediterranean inhabitants. These multiple services are provided by a wide range of natural habitats, and include not only fisheries resources and tourism values (things for which economic values can be ascertained relatively easily), but also waste assimilation, medium for transport, ability to buffer land from storms, and maintaining ecological balances that make life on Earth possible.

Methodologically, the Integrated Assessment was prepared in two stages, which converged later in the process. Firstly, sectorial assessments on pollution and biodiversity led by MEDPOL and SPA/RAC were carried out with the assistance of consultants. BP/RAC, in the meantime started working on the economic valuation. The scope of the latter report was regional, while MEDPOL worked at regional level and SPA/RAC at the national one. Secondly, these reports were synthesized by the Coordinating Unit in an integrated manner with the assistance of another consultant in four sub-regional reports. Information from other sources was included to supplement the work, including in addition a mapping of available data. The draft contained also an analysis of information gaps.

Regional consultants engaged by UNEP/MAP-MED POL who provided text and information include: Dr. François Galgani (Western Mediterranean), Prof. Victor Axiac (Central Mediterranean and Ionian), Dr. Monica Peterlin (Adriatic) and Dr. Nikos Streftaris (Eastern Mediterranean).

Regional and national consultants engaged by UNEP/MAP – SPA/RAC who provided text and information include: Thierry Pérez, (West Mediterranean), Sami Ben Haj, (Central Mediterranean), Bayram Öztürk (Adriatic), Ferdinando Boero (East Mediterranean), Samir Grimes (Algeria), Hocein Bazairi (Morocco), Mohamed Salah Romdhane (Tunisia), Thierry Pérez, Arthur Antonioli. (France), Raphael Simonet (Monaco), Núria Marbà et Carlos M. Duarte (Spain), Argyro Zenetos, Nikos Streftaris, Panayotis Panayotidis, Nomiki Simboura, Maria Salomidi (Greece), Esmail Shakman (Libya), Zamir Dedej, Pellumb Abeshi, Nehat Dragoti (Albania), Branko Vujicak, Tarik Kuposovic (Bosnia and Herzegovina), Jasminka Radovic, Ivna Vuksic (Croatia), Lovrenc Lipej, Borut Mavric, Robert Turk (Slovenia), Bella Galil (Israel), Bayram Öztürk (Turkey), Andreas Demetropoulos (Cyprus), Joussef Halim (Egypt), Manal Nader (Lebanon), Amir Ibrahim (Syria), Silvia de Juan, Jordi Lleonart (Open Seas).

BP/RAC report on the "Economic Value of Sustainable Benefits Rendered by Mediterranean Marine Ecosystems" was jointly drawn up by Anaï Mangos (Marine Ecosystems Programme Officer at Plan Bleu), who was in charge of coordination, Didier Sauzade (Programme Officer "Sea" at Plan Bleu, seconded by Ifremer) and Jean Pascal Bassino (associate professor of economics, University of Montpellier III, and researcher at the DEFI, University of Aix Marseille II, Blue Plan consultant). Patrice Francour (Director of the ECOMERS laboratory, University of Nice Sophia Antipolis) and Odile Chancollon (ECOMERS laboratory,) contributed to the section on marine ecosystems under a specific agreement with the Blue Plan.

With regard to the Integrated Assessment and following the request of the Contracting Parties at the Rome Meeting in April 2010, the integrated report contained a chapter on commonalities of issues and findings for the whole Mediterranean. All this work has been reviewed by two meetings of regional or technical experts and the assessment report was prepared. The Secretariat has submitted the draft for consideration and review to the Second meeting of technical experts on the Application of the Ecosystem Approach by MAP held in Barcelona in July 2010. The report was also subject to comments by the Contracting parties through the second half of 2010. Written comments from Croatia, Greece, France, EC, Israel, Morocco, Spain and Turkey were received and incorporated.

This initial integrated assessment report has been prepared under the auspices of UNEP/MAP Coordinating Unit with the contributions of lead consultant Dr. Tundi Agardy, as based on the sub-regional reports prepared by UNEP/MAP components, MED POL and SPA/RAC, along with contributions of regional and national consultants, and with the regional UNEP/MAP- BP/RAC report on the "Economic Value of Sustainable Benefits Rendered by Mediterranean Marine Ecosystems".

Many portions of the text originate from consultant sub-regional sectorial reports, especially the sections on biodiversity, pollutants, pressures and impacts. Additional material was derived from national reports and from comments and contributions provided by Contracting Parties representatives. Important additional sources of information include the UNEP/MAP-EEA reports, and the Transboundary Assessment of the Mediterranean, as well as cumulative impacts mapping prepared under the auspices of the National Center for Ecological Analysis and Synthesis by Fiorenza Micheli.

After the decision of the Bureau of the Contracting Parties the second draft version, including the comments received, was submitted to GESAMP (Joint Group of Experts on the Scientific Aspects of Marine Environment Protection) for peer review in March 2011. The review process was completed and review comments have been incorporated. The final version of the Integrated Assessment includes the comments received by the Contracting Parties on the previous version and comments and suggested changes provided by GESAMP. It also includes final comments made during the third meeting of Government-designated Experts on the Application of the Ecosystem Approach by MAP in June 2011.

The major findings of the Initial Integrated Assessment are:

1. Coastal and marine habitats deliver valuable ecosystem services of benefit to all inhabitants of the Mediterranean. A wide range of natural habitats like rocky bottoms and seagrass meadows provide these services. For some services, such as fisheries resources and tourism, economic values are relatively easy to ascertain. Other valuable services provided by Mediterranean ecosystems are waste assimilation, transport, buffering the land from storms, and maintaining the ecological balances that make life on Earth possible.

2. Despite compelling evidence of the importance of services delivered by Mediterranean coastal and marine systems, the Initial Integrated Assessment reveals that ecosystem degradation continues. The pressures and impacts, which vary in severity from region to region, include:
 - coastal development and sprawl, driven by urbanization and tourism development, leading to habitat loss and degradation, and erosion/shoreline destabilization;
 - overfishing, and incidental or by-catch, affecting community structure, ecological processes, and delivery of ecosystem services;
 - destructive fishing, including bottom trawling and other fishing methods that result in benthic disturbance;
 - contamination of sediments and biota caused by pollution, primarily from urbanization and industry, but also from antifoulants and atmospheric inputs of hazardous compounds;
 - nutrient over-enrichment, leading sometimes to eutrophication and hypoxia, but more regularly to ecological imbalances (reduced water quality and growth of algae);
 - disturbance and pollution caused by maritime industries, including fisheries, shipping, energy, aquaculture, and desalination (operational as well as accident-related);
 - invasive species spread, in many cases mediated by climate change; and,
 - degradation of transitional or estuarine areas, which serve as critical nursery areas for commercial fisheries and also support unique assemblages of species.
3. Changes in conditions are apparent from 5 years ago:
 - Improvements in water quality are discernible in many places, thanks to strategic efforts to reduce pollutant loading. Quantities of hazardous substances such as DDT and heavy metals are declining in most areas.
 - New issues are emerging which warrant attention:
 - desalination and its effects;
 - aquaculture, including the grow out operations for bluefin tuna; and,
 - cumulative risks due to reduced access and availability of space for multiple conflictive uses.
4. There are significant gaps in data and information:
 - the gap concerning the ability to uniformly assess pressures and states, in order to formulate responses;
 - the limited knowledge of drivers of change in ecosystems; and,
 - the strong bias towards understanding the ecology and human impacts on shallow water environments, particularly rocky bottoms and intertidal areas, as well as seagrass meadows.

The Assessment also identified the critical gaps in understanding that need to be filled in order to advance the Ecosystem Approach process. These are, in summary:

- general lack of information on some pressures, as well as consistently collected data by which to establish trends.
- gap in the information available on the ecology and environmental status of offshore areas, especially areas beyond territorial seas
- gaps in understanding of the impacts of human activity on marine and coastal biodiversity.

The assessment revealed findings, which may catalyze forward movement of Mediterranean countries towards the Ecosystem Approach in two ways:

- i. by identifying (preliminarily) priority issues that are common to all subregions and can serve as the basis for developing an initial list of ecological and operational objectives; and
- ii. by highlighting gaps in understanding created by lack of monitoring or inconsistent monitoring (preventing comparisons across time or geographies).

Once ecological objectives and baselines have been established, mechanisms can be put into place that can easily derive useful trend information. Thought should also be given to “early warning systems” which could alert governments and institutions to the rapid approach towards critical thresholds, where such thresholds have been determined.

It is also stated in the assessment that adopting an Ecosystem Approach in the Mediterranean, with its enormous scale, variety of management challenges, non-uniform capacity for management, and limited resources, will be complicated and will take time. This and future assessments will lead to better understanding of environmental and ecological status, and will present options for further monitoring and evaluation, which will then provide the necessary information for determining trends, and prioritizing issues requiring management action so that the management response is effective and efficient in safeguarding the valuable ecosystems of the Mediterranean.

ii. Preparation of socio-economic analysis

A study on the economic valuation of Mediterranean marine and coastal ecosystems has been finalized by Blue Plan Regional Activity Centre (BP/RAC) of UNEP/MAP. The objectives of the study were to:

- *improve knowledge of the services and assess the sustainable benefits provided by ecosystems with a view to taking them into account more effectively at the regional and national levels;*
- *provide public decision-makers with a common quantitative measurement to improve the management of environmental issues; and,*
- *contribute at the level of the Mediterranean to international initiatives for the economic analysis of ecosystems, such as the European Commission programme "The Economics of Ecosystems and Biodiversity" (2007-2010) and the UNEP programme "Accounting for Economic Activities in Large Marine Ecosystems and Regional Seas" (2006).*

In addition, the principles of the United Nations System of Integrated Environmental and Economic Accounting (2003), has been considered to assess on a macroeconomic basis the economic value of the services provided by ecosystems. The EEA has highly evaluated this study.

Application of the ecosystem approach recognizes that human are integral part of the ecosystem. Social and economic aspects characterizing human activities that impact or use the coastal and marine ecosystems are integral part of the assessments required for a sound implementation of the Ecosystem Approach.

As decided by the parties to the Barcelona Convention, the EU MSFD is an influential source of inspiration for the implementation of ECAP by UNEP/MAP, as it is ecosystem-based and should be implemented by the contracting parties who are also EU Member state. As for the Mediterranean ECAP, MSFD implementation requires an initial assessment as a preparation of marine strategies to be implemented by member states in order to achieve or maintain

GES. Article 8 states that Member States shall make an initial assessment of their marine waters comprising a) an analysis of the essential features and characteristics and current environmental status of those waters; b) an analysis of the predominant pressures and impacts including human activity on the environmental status of those waters; and c) an economic and social analysis of the use of those waters and of the cost of degradation of the marine environment.

By contrast to the Ecosystem Approach in the Mediterranean project, which is a regional cooperation initiative involving the Mediterranean coastal states, the MSFD should be implemented by EU Member States following a Common Implementation Strategy. For this purpose, EU has initiated in due time several working groups (WG) in order to assist the Member states, in particular for the completion of the initial assessment. Blue Plan has represented UNEP/MAP in the Economic and Social Analysis working group (ESA WG). The working plan of this group goes till end of 2012. A first Guidance document has been issued end of 2010. If the economic and social analysis of the use of those waters is rather straightforward, different approaches exist to estimate the degradation costs, very different from one another, mainly:

- the ecosystem services approach;
- the thematic approach; and
- the cost-based approach.

The on-going implementation of these various approaches by Member States will certainly provide a useful experience for application at regional level in the frame of the ECAP-Med, which also requires analysis of the cost of degradation.

Moreover other socio-economic assessments approaches exist, as the one presented in the frame of the UN Regular Process for Global Reporting and Assessment of the Marine Environment, including Socio-Economic aspects. The recent "Possible Outline" recommends a dual approach, consisting i) to present the economic and social implications of each major ecosystem services and ii) to develop the environmental, economic and social effects of measures taken in relation to human activities using the marine environment.

These various approaches will be considered for the next phase of the project and the most adapted to the Mediterranean specificities will be implemented.

Going back over the preparation of socio-economic analysis, it had been considered relevant to launch a first task in order to get an exploratory valuation of sustainable marine ecosystem services benefits assessed at the level of coastal countries and then aggregated at regional scale. This choice has been supported by the EEA. Taking into account the time and data/information gaps, the first results are not exhaustive, they are provisional and underestimated, as they are limited to the sustainable uses. This makes a large difference with other related assessments, especially regarding the regulating services related to the value of the waste treatment. However, they give a first estimation of the economic importance of marine ecosystem in the Mediterranean. Based on the results of the economic valuation of marine ecosystem services in the Mediterranean and considering the experience gained since in this field, it is possible to achieve the integrated initial assessment work at sub regional level by analyzing the social and economic use by human activities of marine waters and assessing the cost of degradation in the mid-term, provided that additional financial results are allocated.

It is also important to take stock of the findings and priorities identified in the assessment report in particular with regards to the threats and have a good knowledge of the management system in place in order to be in a position to analyze the cost of degradation in

case of non-action. It should be noted; however that country ownership will be required for the successful application of the ecosystem approach.

Beside completion of the assessment of socio-economic aspects at regional or sub-regional scale, it is then recommended to initiate a regional ad hoc working group in charge to analyze and adapt to the Mediterranean specificities the best practices learnt from the above mentioned initiatives, in order to strengthen a common and sound understanding of these issues as a preparation of marine strategies to be implemented by coastal states in order to achieve or maintain GES in their national waters and beyond.

The work for finalizing the study was guided by a steering committee led by the BP/RAC with the participation of several regional and national experts. The report is finalized and launched in Blue Plan website.²

iii. **Compilation of existing assessment methodologies and identification of possible quality descriptors of the marine and coastal ecosystem**

With regard to assessment methodologies for the definition of ecological objectives, the Secretariat developed several documents to guide the discussions of experts at both technical expert meetings (held in Rome, April 2010 and Barcelona, July 2010) and ensure a common approach for tackling the methodology for defining the ecological objectives in the ecosystem approach process, which are presented in “*Section (iv). Organization of regional meeting of government-designated experts to consider and review the results of Action 1 of the project.*” As a starting point, it was agreed that the 11 EU MSFD descriptors will be used as a basis for defining the Mediterranean ecological objectives taking into account the regional specificities.

During 2011 – as information from the Initial Integrated Assessment became available – the Contracting Parties to the Barcelona Convention developed a set of ecological objectives, operational objectives, and indicators, which reflect Mediterranean priorities and are coherent with the European Union’s Marine Strategy Framework Directive. This required an intensive process of participation at EU led MSFD development process, as well as distilling corresponding approaches addressing specificities for the Mediterranean. Ecological objectives were defined through an intensive process of consultation led by the UNEP/MAP Secretariat fully owned by the Contracting Parties and with participation of MAP Partners and technical experts.

As a result, an adaptive and integrated strategy for the implementation of the Ecosystems Approach in the Mediterranean will aim to achieve the following **ecological objectives**:

1. Biological diversity is maintained or enhanced. The quality and occurrence of coastal and marine habitats and the distribution and abundance of coastal and marine species are in line with prevailing physiographic, hydrographic, geographic, and climatic conditions.
2. Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystem.
3. Populations of select commercially exploited fish and shellfish are within biologically safe limits, exhibiting a population age and size distribution that is indicative of a healthy stock.
4. Alterations to components of marine food webs caused by resource extraction or human-induced environmental changes do not have long-term adverse effects on food web dynamics and related viability.

² http://www.planbleu.org/publications/Cahier8_marin_EN.pdf.

5. Human-induced eutrophication is prevented, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algal blooms, and oxygen deficiency in bottom waters.
6. Sea-floor integrity is maintained, especially in priority benthic habitats.
7. Alteration of hydrographic conditions does not adversely affect coastal and marine ecosystems.
8. The natural dynamics of coastal areas are maintained and coastal ecosystems and landscapes are preserved.
9. Contaminants cause no significant impact on coastal and marine ecosystems and human health.
10. Marine and coastal litter does not adversely affect coastal and marine environments.
11. Noise from human activities causes no significant impact on marine and coastal ecosystems.

In the 17th Meeting of the Contracting Parties to the Barcelona Convention and its Protocols, the Mediterranean Ecological Objectives associated with Operational Objectives and indicators were adopted (**Annex 1**). Also one of the expected outcomes of the Project (as stated in the Addendum no1 to Contribution Agreement no 21.0401/2008/519114/SUB/D2), the timeline and projected outputs of the Ecosystem Approach roadmap were also adopted (**Annex 2**).

iv. Pilot project for the implementation of all steps of the road map

The project contribution agreement previewed a pilot project in one sub region in order to test all the steps of the ecosystem approach roadmap as approved in Almeria in 2008 by the Contracting Parties, including the determination of the ecological and operational objectives, revision of monitoring programmes and elaboration of management measures. In their meeting held in July 2008, the Contracting Parties did not agree to concentrate the work for implementing all steps of the Ecosystem approach road map on one sub region only. They decided to keep the same speed for all designated areas/sub regions and primarily focus the work on developing the ecological objectives and operationalize them to the extent possible and subject to data availability in indicators and target levels in terms of quality standards.

The work with regard to the revision of the monitoring and management programmes will be undertaken at a later stage after the definition of the ecological and operational objectives, indicators and target levels, subject to decision by the Contracting Parties. However several activities were undertaken with regard to the pilot project in line with project document. In December 2008, the first brainstorming meeting took place with participation of MAP components and the Coordinating Unit. This meeting made a first analysis of possible ecological objectives provided some clarification with regard to operational objectives, indicators and targets and selection of a case study for implementing all ecosystem approach steps. Discussions are ongoing to undertake the case study/pilot project at national/sub-national level as agreed by the Contracting Parties.

As a result of these discussions, a term of reference was prepared for a pilot study in Tunisia, which was planned to be implemented in two phases. The initial one would cover the scoping and scaling of the pilot area; the collection, compilation and organization of available data through a participatory approach with all the sectors concerned in the ecosystem approach (i.e. biodiversity monitoring institutions, fisheries, water and pollution control agencies, coastal zone planning agencies, natural resource agencies, etc); a first analysis of the potential of the available data for the suggestion of management measure with support from the Secretariat; and a needs assessment. The second phase would be implemented at a later stage once the results of the initial phase are available. The initial phase would also allow the better definition of the implementation of the tasks already proposed for the second

phase. These tasks would involve the discussion of good ecological status and targets for the Indicators relevant in the pilot study area; the planning for indicator data acquisition and monitoring, the full analysis of the data compiled in conjunction with the target levels in order to suggest possible management measures.

Due to the political changes that took place in North African countries in 2011, including Tunisia, this activity did not take place. The importance of such an initiative to validate the indicators of Ecological and Operational Objectives makes it crucial to seek ways to realize this activity. It should be a priority to include pilot study (or even studies) in new initiatives and projects for the implementation of ECAP in the Mediterranean.

v. Organization of regional meeting of government-designated experts to consider and review the results of Action 1 of the project

The project document described only one kick off meeting related to the assessment component. In the lifespan of the Project, four regional technical meetings were held successfully in Rome on 8-9 April 2010, in Barcelona on 6-7 July 2010, in Istanbul on 10-11 March 2011 and in Durres on 2-3 June 2011, with participation of almost all Contracting Parties. The objective was to ensure full ownership of the Contracting Parties over the assessment process, which is a key factor for the successful implementation of the other subsequent steps of the ecosystem approach roadmap.

The four meetings were attended by experts from almost all the 21 countries around the Mediterranean (Albania, Algeria, Bosnia and Herzegovina, Cyprus, Croatia, Egypt, France, Greece, Israel, Italy, Lebanon, Libyan Arab Jamahiriya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syrian Arab Republic, Tunisia and Turkey) and also by the European Union (Rome – all countries, Barcelona – 20 countries, Istanbul – 19 countries and Durres 16 countries. European Union was represented in all the meetings). This was a concrete indicator of high level of ownership.

Additionally, the Coordinating Unit and the Components of the Mediterranean Action Plan (MAP), i.e. MED POL, the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), the Blue Plan Regional Activity Centre (BP/RAC), the Priority Actions Programme Regional Activity Centre (PAP/RAC), the Specially Protected Areas Regional Activity Centre (SPA/RAC), the Cleaner Production Regional Activity Centre (CP/RAC) and INFO/RAC were also represented at the meetings.

In the process, international and intergovernmental organizations like the International Union for Conservation of Nature (IUCN) and the European Union's Joint Research Centre (JRC) and General Fisheries Commission for the Mediterranean (GFCM FAO), together with national and regional NGOs such as the Mediterranean Association to Save the Sea Turtles (MEDASSET), the Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE), Mediterranean Protected Areas Network (MedPAN), the World Wide Fund for Nature (WWF) and the Association for Forests, Development and Conservation (AFDC) provided their inputs. The role and the cooperation with GFCM should be highlighted, given the specific mandate and the relevance of data they hold for some of the objectives. This cooperation should continue in the future.

Several working documents were prepared by the help of the consultants under this project and used as references in the discussions during these four meetings:

	WORKING DOCUMENTS:
BARCELONA	<ul style="list-style-type: none"> • Ecological objectives, Monitoring, Effectiveness, Timetable
ROME	<ul style="list-style-type: none"> • Progress report on implementation of the roadmap adopted by Decision IG 17/6 of the Contracting Parties for the application of ecosystem approach by MAP • Economic value of sustainable benefits coming from Mediterranean marine ecosystems • Pre-assessment reports for the four sub-regions: Step 3 in the ECAP Process
ISTANBUL	<ul style="list-style-type: none"> • Draft Proposed Ecological Objectives, Operational Objectives and Indicators in the framework of implementing the Ecosystem Approach UNEP/MAP
DURRES	<ul style="list-style-type: none"> • Progress report on the implementation of the roadmap adopted by Decision IG 17/6 of the Contracting Parties for the application of ecosystem approach • Ecological objectives, operational objectives and indicators for the application of the ecosystem approach in the Mediterranean Sea • Ecological objectives, operational objectives and indicators for the application of the ecosystem approach in the Mediterranean Sea • Draft Initial Integrated Assessment of the Mediterranean Sea: Fulfilling Step 3 of the Ecosystem Approach Process

Technical support was provided by UNEP/MAP consultants Tundi Agardy and UNEP GRID ARENDAL Center.

The summary reports of the meetings are provided in **Annex 3**.

2.2 Component 2: Identification and preparation for nomination of Specially protected areas of Mediterranean Importance (SPAMIs) by the CoP of the Convention

This component continues the work engaged during a previous project funded by the European Commission, entitled "Identification of possible SPAMI in the Mediterranean areas beyond national jurisdiction" (Grant contract n°21.0401/2007/485420/SUB/D2). This first phase of the initiative consisted in identifying, on the basis of sound science, priority conservation areas in the open seas, including the deep sea that could contain sites that could be candidates for the SPAMI List.

Considering that the first phase of the initiative ended on December 2009, after one extension of the project period agreed by the European Commission, component 2 of the present project has begun at the beginning of 2010.

The beginning of this component implementation was characterized by the recruitment of the new backstopping project officer on May 2010, after the departure on February 2010 of the backstopping project officer who had also worked during the previous high seas project recruitment. The interim period between them was covered by a consultancy.

i. Appointment of the Steering Committee

A Steering Committee was set up, composed of the following institutions:

- UNEP's Division for Implementing Environmental Policies and Division for Environmental Law and Conventions;
- Mediterranean Action Plan's Coordinating Unit (CU, UNEP/MAP)
- European Commission;
- United Nations Food and Agriculture Organisation (UN-FAO);
- General Fisheries Commission for the Mediterranean (GFCM);
- Secretariat of the OSPAR Convention;
- International Maritime Organization (IMO);
- Mediterranean Regional Centre for Emergency Action against Accidental Marine Pollution (REMPEC);
- Secretariat of the Agreement on the Conservation of Cetaceans of the Black Sea, the Mediterranean Sea and the Contiguous Atlantic Area (ACCOBAMS);
- Secretariat of the Pelagos Sanctuary;
- International Union for the Conservation of Nature – Cooperation Centre for the Mediterranean (IUCN-Med); and,
- WWF Mediterranean Programme (WWF MedPO).

ii. Legal analysis about the status of each selected area and preliminary delimitation of the shortlisted areas

These two activities were initiated and engaged during the first project funded by the European Commission ("Identification of possible SPAMI in the Mediterranean areas beyond national jurisdiction") project's first phase, through different studies revised by the Steering Committee such as an overview of the scientific findings relevant to identify SPAMI in the open seas, including the deep sea and an analysis of the Mediterranean fisheries in the Mediterranean open seas, including deep seas and their impacts on vulnerable ecosystems.

The main output of this work was the identification of thirteen priority conservation areas in the Mediterranean open seas, including the deep sea, that could contain sites that could be candidates for the Specially Protected Areas of Mediterranean Interest (SPAMI) List.

This work³ was finalized and presented for the Extraordinary Meeting of the Focal Points for Specially Protected Areas held on 1 June 2010 in Istanbul, Turkey. The list of priority conservation areas located in the Areas Beyond National Jurisdiction (ABNJ) that could become part of the Mediterranean protected areas network was revised and 12 priority conservation areas were retained by the SPA Focal Points.

In addition, a study on legal issues, 'Jurisdictional issues of the Mediterranean Sea', as well as a GIS depicting the current known jurisdictional status of Mediterranean waters, by country, were carried out during the project's first phase. Both led to an appraisal of the maritime areas under national jurisdiction that have been declared in the Mediterranean and their impact on the setting up of Marine Protected Areas in Areas wholly or partly Beyond National Jurisdiction.

This work has been a practical tool for the exchanges of views among countries during the current phase regarding the legal status of each area. It was pursued in greater depth in the Project's second phase via the preparation of an approach for facilitating the preparation of joint proposals for inclusion in the SPAMI List in accordance with Article 9 of the SPA/BD

³ http://medabnj.rac-spa.org/images/stories/Publications/overview_report.pdf

Protocol, as requested by the Bureau of the Contracting Parties during its meeting held on the 5th and the 6th May 2010.

As stated in the report of the Meeting (UNEP/BUR/70/5): *“In particular, the Bureau addressed ways and means for elaborating a sound legal and institutional approach for establishing SPAMIs in areas beyond national jurisdiction for further discussion by the Bureau and SPA/RAC Focal Points. This approach would help creating a clear vision with regard to SPAMI management and the need to enhance cooperation with other component international organizations for this purpose, in line with MAP Programme of work and Marrakesh Declaration.”*

For this purpose, a working group meeting with experts from international organizations and Mediterranean independent experts was convened upon MAP Coordinating Unit's initiative in Athens, on the 3rd and the 4th March 2011, to discuss and elaborate this approach.

The meeting was attended by representatives of the following international and regional organizations: Division for Ocean Affairs and the Law of the Sea of the United Nations (UN DOALOS), Food and Agriculture Organization of the United Nations (UN FAO), International Maritime Organization (IMO), Secretariat of the Convention on Biological Diversity (CBD), Secretariat of the Agreement on the Conservation of Cetaceans in the Black Sea Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS), Secretariat of the General Fisheries Commission for the Mediterranean (GFCM), Secretariat of the OSPAR Convention, International Union for Conservation of Nature (IUCN), WWF Mediterranean Programme (WWF-MedPO), Greenpeace, *Institut du Développement Durable et des Relations Internationales* (IDDDRI), as well as by independent experts.

Taking into account the recommendations of this meeting, the approach document was presented at the Tenth Meeting of SPA Focal Points. The final version of this approach document, including the comments made by SPA Focal Points is presented in the information document UNEP(DEPI)/MED WG.368/Inf.3 (*Draft approach to facilitate the preparation of joint proposals for inclusion in the SPAMI list in accordance with article 9 of the SPA/BD Protocol* - http://195.97.36.231/acrobatfiles/11WG368_Inf3_Eng.pdf).

This approach aims to provide indications and suggestions to facilitate proposals for inclusion in the SPAMI List for areas situated partly or wholly beyond national jurisdiction in the Mediterranean Sea. It also includes elements on the management of SPAMIs beyond national jurisdiction, in accordance with the relevant international legal framework.

The legal aspects of the issues considered in the approach document are detailed in the report *“Note on the establishment of marine protected areas beyond national jurisdiction or in areas where the limits of national sovereignty or jurisdiction have not yet been defined in the Mediterranean Sea”* (UNEP(DEPI)/MED WG.368/Inf.4, which can be reached at - http://195.97.36.231/acrobatfiles/11WG368_Inf4_Eng.pdf).

iii. First meeting of the Steering Committee

The members of the Steering Committee attended the Extraordinary Meeting of Focal Points and contributed to the consultation with the Focal Points concerning the activities to be undertaken in the Second Phase of the Project. The Extraordinary Meeting of Focal Points also offered the opportunity to SPA/RAC and the members of the Steering Committee to consult and exchange their opinions about the work plan of the Project's Second Phase.

In addition, a Meeting of the Steering Committee was held on 16 December 2011 in Tunis to present the activities carried out since the last meeting of the Steering Committee (Genoa, November 2009) and to discuss with the Committee Members the orientations of the new phase of the project for 2012-2013.

As presented in the meeting working documents UNEP(DEPI)/MED WG.368/3 et UNEP(DEPI)/MED WG.368/4, the meeting validated the activities proposed for the next phase of the project to be developed around the following strategic orientations:

- Contributing to improve the state of knowledge on open sea and deep sea ecosystems and their uses
- Contributing to build a framework with the countries and competent organizations to facilitate the joint establishment of SPAMIs in open seas, including the deep seas.

During this meeting, the representative of Oceana, international marine conservation organization, expressed Oceana's wish to pursue her participation to the next meetings of the Steering Committee. Considering the convergence of Oceana's activities with the objectives of the project, it was proposed that Oceana would be considered as member of the Steering Committee if the other members of the Steering Committee who were not represented during this meeting have no objection with this proposal.

iv. Consultation meetings

Following the approval of the Bureau of the Contracting Parties, SPA/RAC convened an Extraordinary Meeting of the Focal Points in June 2010 at Istanbul, Turkey. to present the priority conservation areas identified during the First Phase of the Project and to consult with the Focal Points as for the next steps to be undertaken. For budgetary reasons, the meeting was organized back-to-back with a meeting of the SAP BIO National Correspondents, as the SAP BIO National Correspondents and the Focal Points for SPA were the same expert for many Contracting Parties.

This meeting was a step to consult the countries and to encourage their involvement in the process of the project's second phase. The Meeting examined the results of the project's first phase validated by the Steering Committee. The list of priority conservation areas located in the open seas, including the deep seas, was revised and 12 priority conservation areas were retained.

On the occasion of this meeting, some countries expressed their interest to work jointly:

- the representatives of France and Spain expressed their intention to pursue their cooperation with regard to the Gulf of Lions and to consider the possibility of preparing a proposal for the declaration of a SPAMÍ in this open-sea area, including deep seas
- the representative of Spain also referred to the wish of his country to pursue the process of cooperation with Morocco and Algeria concerning the Alboran Sea
- The representative of Slovenia invited the countries bordering the Adriatic Sea to take advantage of a forum to be held in October 2010 ("Towards a representative MPA network in the Adriatic") to progress towards coordinated measures for establishing a SPAMI in this high seas region.

At the same time, and in accordance with the recommendation of the Extraordinary Meeting of the SPA/RAC Focal Points, the UNEP/MAP Coordinating Unit sent an official letter to Ministers of the Environment of the Contracting Parties inviting them to express their interest

to consider the preparation of SPAMI proposals for the priority conservation areas identified by SPA/RAC with the project support and discussed at the Extraordinary Meeting of SPA/RAC Focal Points which were located in areas partly or wholly beyond national jurisdiction in accordance to article 9 of the Protocol. Some responses were received:

- Croatia requested SPA/RAC for additional information on the second phase of the project and the process to be implemented, in order to prepare their official response to UNEP/MAP-Barcelona Convention.
- Libya requested also more information on the process.
- Through informal contacts, the French Focal Point explained that the preparation of the French official response is on-going, at a stage of inter-ministerial consultation. Moreover, the French Focal Point has repeated the interest of France to be engaged in the second phase of the project for the Gulf of the Lions area.
- The Ministry of Environment of Turkey explained their position after internal consultations with their Ministry of Foreign Affairs.

Relying on the declarations made during the Istanbul meeting and on exchanges with countries' representatives, the MAP-RAC/SPA organized the first consultation meetings for the Alboran Seamounts area and the Gulf of Lions shelf and slope area with the concerned neighbouring countries:

- the consultation meeting for the neighbouring countries of the Alboran Sea area was organized with representatives of Algeria, Morocco and Spain on the 15th and 16th March 2011 in Malaga, Spain
- the consultation meeting for the neighbouring countries of the Gulf of Lions area was organized with representatives of France and Spain on the 17th and 18th March 2011, in Malaga, Spain

RAC/SPA attempted to organize a consultation meeting for the Adriatic countries in 2011, but the meeting was postponed because of the lack of readiness at that time amongst the countries.

The main objective of these meetings was to present the proposed methodology and to discuss with the representatives of the concerned countries the feasibility of setting up sub-regional working groups to support the consultation process.

These meetings were an opportunity for the representatives of the countries to meet and to exchange on the issue. The countries' representatives presented the organization of their national administration, as well as their national projects and initiatives which contribute to improve environmental and scientific knowledge on both areas.

For each country, it was indicated that they are many stakeholders, involving several departments and ministries at the central level of the States (Ministry of Foreign Affairs, Ministry of Fisheries, Ministry of Environment and Ministry of Defence).

In this framework, the discussions of both meetings highlighted the necessity to consult at the national level the different departments concerned. So, before beginning sub-regional working group processes, it was stated that it is important for the countries to set up national consultation processes involving the different technical departments concerned by the issue.

These meetings confirmed that the process would be a very long and complex one involving important efforts for national consultation in each country.

A second meeting of the France – Spain working group was organized on the 19th and 20th December 2011 in Barcelona, Spain, to present to the countries representatives the work carried out by the experts on the preparation of the synthesis report on the description of the ecology of the Gulf of Lions and to discuss the next step of the working group, in particular the possibility for the French and Spanish representatives to make a joint political statement at the 17th Meeting of the Contracting Parties to the Barcelona Convention.

v. Data collection including field surveys and elaboration of the draft presentation reports

These activities were developed to support the consultation processes launched between the neighbouring countries of the Gulf of Lions area and the Alboran Sea area.

Gulf of Lions area

The participants agreed during the Malaga meeting that much biological and environmental data is available on the Gulf of Lions considering research and exploration efforts made by France and Spain in this area.

Considering that these data are probably scattered within the different national research institutes, it was proposed that RAC/SPA supports the working group to make an inventory, to collect and to compile these data with the goal of: i) establishing a state of knowledge on the ecology of the considered area by establishing an inventory, collecting and compiling biological and environmental data related to the ecology of the Gulf of Lyons and to its uses (mainly fishing activities); and, ii) facilitating the work of the countries to prepare when the time comes the presentation report for the site(s) of the 'Gulf of Lions shelf and slope' area likely to be candidate(s) for inclusion in the SPAMI List.

The information synthesized will be considered as a first contribution:

- to identify later the sites of the Gulf of Lions that deserve to be managed, with a view towards the conservation and sustainable uses of the resources
- to support a first reflection on the management measures that could be associated to these sites.

Campaigns carried out by France (Marine Protected Areas Agency) for acquiring data on the Gulf of Lions will also be taken into consideration. Some surveys are under processing (exploration of the canyons) and others are being launched (surveys for seabirds and marine mammals) in the Natura 2000 framework. Moreover, data obtained by Spain (Ministry of Environment and Rural and Marine Affairs) in the framework of the LIFE+ Project conducted on the Gulf of Lions "Inventory and designation of marine Natura 2000 areas in the Spanish sea" (INDEMARES Project) are just published, waiting for the implementation of the corresponding actions.

After receiving the comments on the draft Terms of reference from the French and Spanish representatives, RAC/SPA hired in September 2011 several experts:

- experts in Mediterranean marine ecology
- a fisheries expert
- an expert specialized in marine mammals
- an expert specialized in seabirds.

Data were collected on the basis of the published bibliography, the grey literature (institutional technical reports for example) and any eventual personal communications from experts contacted for the purpose of the mission.

In addition, for supporting the decision making process, a list of the relevant resource persons on the ecology of the Gulf of Lions (scientific or technical experts) was established through this work.

Each expert prepared a draft report that was presented to the countries representatives at the Barcelona meeting held on 19th and 20th December 2011. Taking into consideration the comments and recommendations expressed during the meeting, a synthesis report will be finalized during the 2012 first semester.

At the end of the mission, the whole work produced by the different experts will be compiled in a report entitled *“Description of the ecology of the Gulf of Lions shelf and slope area and identification of the areas that may deserve to be protected”*. As far as possible, this report will establish a reference state of the area with a view of measuring the future evolution of the environmental data of the area.

This synthesis report will be then transmitted to the national representatives involved in the working group who can use the report to support the national consultation processes with other Departments concerned.

RAC/SPA developed in 2011 a project for carrying out an oceanographic survey for collecting data on the Alboran Sea, in the Moroccan waters, around Xauen and Tofino banks area, off Al Hoceima. The overall objective of this campaign is to strengthen the state of knowledge of the Alboran Sea which is singular in the Mediterranean considering its ecological and oceanographic features.

At the national scale, this project is supported by the Moroccan National Institute of Fishery Sciences (INRH).

For optimizing means and in a spirit of synergy, RAC/SPA developed this project jointly with the IUCN Centre for Mediterranean Cooperation and Oceana. A tripartite Memorandum of Understanding was signed in October 2011 in order to carry out the survey during the fall.

IUCN-Med carried out in 2009-2010 on the Alboran Sea the MedRAS initiative whose aim is to identify priority habitats and species to be managed and protected in the Mediterranean Sea. This project led to propose around ten priority conservation areas in the Alboran Sea, such as Xauen and Tofino banks area, representative of the diversity of the marine ecosystems of this sub-region and ensuring their biological connectivity.

In the same way, the project carried out by Oceana “Oceana MedNet – 100 reasons to reach 10% target” consists in a proposal for a network of marine protected areas in the Mediterranean, including in the Xauen and Tofino banks area. In addition, Oceana conducted in 2010 and 2011 through the Life + Indemares project an expedition to study the Seco the Olivos seamount, also known as Banco de Chella, in the Alboran Sea.

As the authorizations for carrying out the oceanographic campaign were delayed by the competent authorities at the period of the year when weather conditions are most favourable, the organization of this campaign is under way.

A meeting was organised on 28 February 2012 in INRH premises with representatives of the different organizations in order to discuss about the project aimed to facilitate the acceleration of administrative procedures for the much delayed delivery of the authorizations.

vi. Information campaign

Some information materials were prepared on the occasion of meetings: a leaflet was distributed at the Tenth Conference of the Parties to the Convention on Biological Diversity (Nagoya, Japan, 18-29 October 2010) and a CD including the technical reports prepared in the project framework was distributed at the Tenth Meeting of the Focal Points for Specially Protected Areas (Marseilles, France, 17-20 May 2011).

An order form was established in December 2011 in order to publish:

- the legal analysis report "*Note on the establishment of marine protected areas beyond national jurisdiction or in areas where the limits of national sovereignty or jurisdiction have not yet been defined in the Mediterranean Sea*" (in English and French versions)
- a leaflet presenting the main activities and results of the project second phase as well as the reflections for implementing the next phase.

Consultations, communications and advocacy activities were also carried out with national, regional and international partners.

3. Lessons learned

Component 1: Ecosystem approach

Even though the Contribution Agreement (N°21.0401/2008/519114/SUB/D2) was signed on 19 December 2008 between the European Community and the Coordinating Unit for the Mediterranean Action Plan of the United Nations Environment Programme (UNEP/MAP), some delays were experienced in the start-up of the project mainly due to works being focused on the internal planning and coordination for project implementation, preparation of terms of reference for different assignments such as consultancy for preparing the sub regional reports on pollution, sub regional reports on biodiversity, national reports on biodiversity, consultancy to assist the Coordinator of MAP in coordinating and managing the project, and internal brainstorming meetings which were held due to the innovative and difficult character of the subject. The implementation of the project was substantively advanced in particular after the Meeting of the 16th Contracting Parties, November 2009 and the first meeting was organized in April 2010.

i. Initial Integrated Assessment

1. Initially, the methodology followed was to carry out sectorial and /or thematic assessments lead by MAP components and to integrate the products in a consolidated report at a later stage. The differences in the initial approaches of BP/RAC's regional (Mediterranean Scale) assessments versus MEDPOL's sub-regional assessments versus SPA/RAC's national assessments required additional efforts for consolidating data and made it more difficult to determine cumulative effects in the integrated assessment. In the future, the assessment method should be integrated since its inception and agreed upon at the beginning of the process. The establishment of an assessment cycle by developing a UNEP/MAP policy on assessments of the marine and coastal environment, which will be developed in this biennium, should be supportive of this approach.

2. The science of socioeconomic valuation of ecosystems is still at a very early stage and has limited the ability of producing more conclusive results at this stage. During this biennium it is expected to advance with a more in-depth socioeconomic analysis in line with UN regular process.
3. It was apparent since the first technical meeting that the legitimacy of the Integrated Assessment required a degree of parties engagement and peer review at regional and national level that have not been foreseen in the original project proposal. The activities of the project were modified to permit/allow for this, including with a peer review by GESAMP.
4. The results of the Integrated Assessment demonstrated that there was no ecological justification for strictly applying management measures according to the 4 sub-regions. The question of geographical scale will need to be evaluated in the future Mediterranean ECAP initiatives, at regional, national and local level, as appropriate
5. It was not possible to include GIS displays of key features due to the lack of compatibility of data.

ii. Compilation of existing assessment methodologies and identification of possible quality descriptors of the marine and coastal ecosystem

1. The main challenge was to ensure coherence in the development of two approaches that are running parallel – MSFD and the Ecosystems Approach of the Barcelona Convention – with the objective of ensuring synergies and avoiding duplications in the two related policy processes, while at the same time ensuring respect of the Barcelona Convention’s own decision-making processes and priorities for Non-EU countries. The three issues listed below were the tools and approaches against this challenge:
 - (i) Under the project, the process of detailed analysis and follow up of related EU MSFD policies were activated and the Report “The Mediterranean Action Plan / Barcelona Convention and Implementation of the EU Marine Strategy Framework Directive, March 2011” was prepared. As a tool for ensuring the coherence, it was decided to use the MSFD descriptors and criteria as a starting point for the MAP methodologies for developing ecological objectives and indicators.
 - (ii) Another approach was increasing the ownership of the ECAP process by all Parties to the Barcelona Convention, by two complementary strategies, which worked well. First by increasing the number of policy discussions and secondly by simplifying MSFD demands to the capacities of the countries around the basin and adding specific dimensions of Barcelona Convention such as ICZM to the framework.
 - (iii) The demands of communications and advocacy on ECAP remains still high, particularly in countries which are not part of the EU MSFD complementary process,, and should continue to be addressed also in new initiatives to take place in this biennium.

iii. Project Methodology and Approach

ECAP is becoming an overarching strategy for implementing the Barcelona Convention and its protocols in a more integrated modus operandi. This project was the first attempt by MAP to work in such a manner, however coordination of all different activities by different components in different locations has demonstrated to be challenging and demanding, while the project did not include dedicated capacities for coordination and/or project management,

or such a capacity existed within the current MAP Coordinating Unit structure. Therefore the pace of project implementation has been affected by the partial time that could have been allocated by the UNEP MAP for coordination, particularly during periods when limited human resources were dedicated mostly to policy making processes. This delayed the holding of the meeting on methodologies for GES and targets planned to be held in autumn 2012, when in the same period, the Focal Points Meeting and the preparations for COP17 were taking place. Such critical projects, with a significant potential of sustainability and up-scaling require full time project management, and this needs to be taken into consideration in future project development processes. By doing so, a contribution will also be made to the ambition of having UNEP/MAP delivering as one, which Contracting Parties are so much expecting.

Additionally, even though not realized, the need for a pilot activity was noted as utmost important. Many indicators identified for Ecosystem Objectives and framework are new, and efforts should be initiated for validation of them.

Component 2: Identification and preparation for nomination of Specially Protected Areas of Mediterranean Importance (SPAMIs) by the CoP of the Convention

1. Contracting Parties interest in being involved in this part of the project was relatively low, with only a few countries agreeing to participate to the activities. Different reasons could be identified such as the complex geopolitical context which limits the success of interventions based only on ecological considerations; significant and growing economic interests, particularly related to the potential of hydrocarbon exploitation as well as legal concerns. Among these, the following two obstacles are particularly important for countries that have considered the joint establishment of SPAMIs:
 - (i) several instances of maritime boundaries are still unsettled in the Mediterranean, and even if the SPA/BD Protocol provides for the establishment of SPAMIs in these situations, some countries don't want to be involved in consultation process with their neighbouring countries until jurisdictional issues are settled;
 - (ii) The establishment of management bodies and enforcement of regulatory measures in areas situated partly or wholly on areas beyond national jurisdiction offers particular challenges as there are legislative vacuums some of which could be filled through complex agreements with other regulatory systems (maritime, fisheries, etc.) For this reason some countries informed that they prefer to see progress in the process initiated by the United Nations General Assembly through the *Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction* before moving forward in the Mediterranean region. Current topics of that group to be treated on 2012 are Identification of gaps and ways forward with a view to ensuring an effective legal framework for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction; and conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction, including marine protected areas, which is a long-term process and will be followed closely by UNEP/MAP.
2. The project made an important contribution to setting up consultation processes in line with the mandate provided to UNEP/MAP – Barcelona Convention. However, its commitment to establish three Areas Beyond National Jurisdiction (ABNJ) was obviously beyond the realm of its mandate as this is a sovereign decision pertaining exclusively to the Parties. In addition, the consultation meetings between the neighbouring countries showed that the joint establishment of SPAMIs is a very long and complex process that requires sub-regional and national consultation processes involving several departments

and ministries at the central level of each State (mainly Ministry of Foreign Affairs, Ministry of Fisheries, Ministry of Environment and Ministry of Defence).

3. Two particular situations have slowed the implementation of the project: the fact that progress requires the concurrence of all countries neighbour to the area and delays by one affect progress in the whole area; and changes in Government and Ministerial organization
4. Progress in establishing joint management areas and enforcing regulatory measures requires working together with partners even beyond the originally envisaged Steering Committee so as to ensure a joint approach that seeks synergies between different regimes which are as simple as possible and avoid “overlapping” of competencies. In this spirit, two measures are being taken.
 - (i) The Memorandum of Understanding between the GFCM and UNEP/MAP that addresses these issues is being finalized and is expected to be signed between the MAP Coordinating Unit and the Secretariat of the GFCM
 - (ii) The Contracting Parties have recognized the need to facilitate the consultation and coordination processes for the joint preparation of proposals for inclusion in the SPAMI List in accordance with Article 9 of the Protocol before launching formal processes. Therefore they have decided to add to the Annotated Format for the presentation reports for the areas proposed for inclusion in the SPAMI List a new section that could be used for the preliminary declaration of SPAMI proposals. The new section to be added to the Annotated Format appears as Annex I to the Decision IG.20/7 adopted at the 17th Conference of the Parties to the Barcelona Convention (Paris, France, 8-10 February 2012).
5. Additionally, it is clear that the lack of environmental data and biological evidences on the main part of these offshore areas and deep sea ecosystems is often another major constraint for the countries to develop strategies and policies for managing in a sustainable way these areas and protecting the most sensitive ecosystems. That is the reason for an urgent need of further oceanographic surveys of deep sea ecosystems in the Mediterranean.
6. Lastly, the creation of this joint activity by the EC and UNEP MAP, upon the increasing worldwide interest in the conservation of the open ocean had, as a consequence, the delivery of outputs such as the Mediterranean EBSAs list before the time that a prototype worldwide repository process to register EBSAs was to be prepared by the CBD. As a result, the pilot process of submitting data to that repository commenced in February 2012. Hence, it is fundamental that the Mediterranean process is included, so as to grant it worldwide dimension and further recognition and support to the future SPAMIs to be declared within them, since the SPAMIs aim to allow the conservation of important parts of each EBSA.

5 Achievements

Action	Activity	Output	Indicator	Delivery status as per the indicator Where appropriate, indicate % of accomplishment	Notes / Explanations if partially delivered Insert comments where missing, explaining envisaged follow up, including in the possible ENRTP contract.
Component 1: Further implementing the Ecosystem Approach within the Barcelona Convention through the following key actions	Preparation of the assessment documents on ecological status and pressures and impacts based on the agreed Table of Contents	Four draft assessment documents containing information in the four respective areas and identifying gaps with proposals for further work	Initial Integrated Assessment Report submitted	Completed	Recommended follow up : <ul style="list-style-type: none"> •Complement the integrated assessment of the Mediterranean Ecosystem with a socio-economic assessment and establish an assessment cycle by developing a UNEP/MAP policy on assessments of the marine and coastal environment to be periodically implemented; Follow-up of the gaps identified by the Integrated assessment, taking into account the Table of Contents •Work on methodologies for the determination of good environmental status and target for each of the 11 agreed Ecological Objectives; and implement a pilot case which successfully tests ECAP indicators; •Prepare an integrated monitoring system based on the indicators and targets; •Develop and review relevant measures for implementation of ECAP. •Enhance capacities for overall governance of the Ecosystems Approach.
	Preparation of socio-economic analysis	Preliminary Socio-economic analysis Report	The Report “The economic value of sustainable benefits Rendered by the Mediterranean marine ecosystems” published and disseminated	Completed	Recommended follow up : <ul style="list-style-type: none"> - Achievement of the regional socio-economic assessment (incl. cost of degradation) according MSFD and/or UN Regular Process methodologies - Initiation of Ad Hoc working group for common understanding of these issues and ownership strengthening at the country level

	Compilation of existing assessment methodologies and identification of possible quality descriptors of the marina and coastal ecosystem	<ul style="list-style-type: none"> • Ecological Objectives associated with operational objectives and indicators • ECAP roadmap 	Objectives and Roadmap adopted by Contracting Parties	Completed	Definition of Good Environmental Status and targets
	Organization of regional meeting of government-designated experts to consider and review the results of Action 1 of the project	Agreed documentation and proposals to the Meeting of Contracting Parties	Quality of the information submitted to Meeting Decision by COP 17 on ECAP	Completed	
	Pilot project for the implementation of all steps of the road map (to be carried out in Tunisia)	The Reports produced at the end of collection, compilation and organization of available data through a participatory approach with all the sectors concerned in the ecosystem approach	Good ecological status and targets for the Indicators relevant in the pilot study area are revealed.	Not-completed	Recommended follow-up: <ul style="list-style-type: none"> • include pilot study (or even studies) in a newly developed Project for the implementation of ECAP in the Mediterranean
Component 2: Identification and preparation for nomination of Specially protected areas of Mediterranean Importance (SPAMIs) by the CoP of the Convention	Appointment and Meeting of the Steering Committee (Tunis, 16 December 2011)	Report of the Meeting	The Composition of the committee members is adapted to the objectives of the project.	Completed	
	Consultation meeting for the neighboring countries of the Alboran Sea area (15-16 March 2011)	Report of the Meeting	The consultation meeting timely held and attended by the representatives of the concerned countries	Completed	
	Consultation meeting for the neighboring countries of the Gulf of Lions area (17-18 March 2011).	Report of the Meeting	The consultation meeting timely held and attended by the representatives of the concerned countries	Completed	

	Organization of the France-Spain working group for the Gulf of Lions area (Barcelona, 19-20 December 2011)	Report of the Meeting	The consultation meeting timely held and attended by the representatives of the concerned countries	Completed	
	Mission for making an inventory, collecting and compiling environmental data available on the Gulf of Lions	Reports of the experts	Delivery of the reports	Partially completed (80%) Draft reports were delivered. Final reports will be delivered in the 2012 first semester.	Contractually agreed deadline of the final report is first half of 2012
	Oceanographic surveys	Report of the survey for collecting data on the Alboran Sea, in the Moroccan waters, around Xauen and Tofino banks area	Delivery of the report	Activity initiated, a Memorandum was established with IUCN and Oceana in 2011, including their economic contribution and funds of all parties were bind. Field survey implementation planned for 2012	Waiting favorable weather conditions and the delivery of the related authorizations by the Moroccan authorities. The results would reinforce the scientific justification for the conservation of the Moroccan part of Alboran Sea. Carry out oceanographic surveys in other potential SPAMIs, where the willingness of neighboring countries is demonstrated
	Elaboration of the draft presentation reports	No SPAMI presentation reports submitted to the meeting of the NFP for SPA in 2011. An important new output has been achieved Instead: An officially adopted new section added to the Annotated Format for the presentation reports for the areas proposed for inclusion in the SPAMI List that can be used for the preliminary declaration of SPAMI proposals.	Reports of the Meeting of the National Focal Points for SPA	SPAMI presentation reports output - not completed Format on preliminary declaration of SPAMI proposals adopted by Contracting Parties - completed	The preparation of joint SPAMI presentation reports is a complex process that needs close consultation between neighboring countries. This process, as well as the preparatory works developed through the consultation meetings, is being developed and has much improved thanks to the project contribution. It is expectable that a project follow up would allow such preliminary declarations for possibly two or three areas
	Preparation of information materials	The stakeholders, in particular the concerned national authorities, are informed	Information materials delivered	Partially completed (70%)	Contractually agreed deadline of the final report is first half of 2012

ANNEXES

ANNEX 1. Ecological Objectives associated with Operational Objectives and Indicators

	Ecological Objective	Operational Objectives	Indicators
1. Biodiversity	Biological diversity is maintained or enhanced. The quality and occurrence of coastal⁴ and marine habitats⁵ and the distribution and abundance of coastal⁶ and marine species⁷ are in line with prevailing physiographic, hydrographic, geographic and climatic conditions.	1.1 Species distribution is maintained	1.1.1 Distributional range
			1.1.2 Area covered by the species (for sessile/benthic species)
		1.2 Population size of selected species is maintained	1.2.1 Population abundance
			1.2.2 Population density
		1.3 Population condition of selected species is maintained	1.3.1 Population demographic characteristics (e.g. body size or age class structure, sex ratio, fecundity rates, survival/ mortality rates)
		1.4 Key coastal and marine habitats are not being lost	1.4.1 Potential / observed distributional range of certain coastal and marine habitats listed under SPA protocol
			1.4.2 Distributional pattern of certain coastal and marine habitats listed under SPA protocol
1.4.3 Condition of the habitat-defining species and communities			

⁴ By coastal it is understood both the emerged and submerged areas of the coastal zone as considered in the SPA/BD Protocol as well as in the definition of coastal zone in accordance with Article 2e and the geographical coverage of Article 3 of the ICZM Protocol

⁵ Regarding benthic habitats currently, sufficient information exists to make a prioritization amongst those mentioned in the UNEP/MAP - RAC/SPA list of 27 benthic habitats and the priority habitats in areas beyond national jurisdiction following CBD decisions VIII/24 and VIII/21 paragraph 1 . These could include from shallow to deep: biocoenosis of infralittoral algae (facies with vermetids or trottoir), hard beds associated with photophilic algae, meadows of the sea grass *Posidonia oceanica*, hard beds associated with Coralligenous biocenosis and semi dark caves, biocoenosis of shelf-edge detritic bottoms (facies with *Leptometra phalangium*), biocoenosis of deep-sea corals, cold seeps and biocoenosis of bathyal muds (facies with *Isidella elongata*). Amongst pelagic habitats upwelling areas, fronts and gyres need special attention and focus.

⁶ By coastal it is understood both the emerged and submerged areas of the coastal zone as considered in the SPA/BD Protocol as well as in the definition of coastal zone in accordance with Article 2e and the geographical coverage of Article 3 of the ICZM Protocol

⁷ On the basis of Annex II and III of the SPA and Biodiversity Protocol of the Barcelona Convention

2. Non-indigenous species	Non-indigenous⁸ species⁹ introduced by human activities are at levels that do not adversely alter the ecosystem	2.1 Invasive non-indigenous species introductions are minimized	2.1.1. Spatial distribution, origin and population status (established vs. vagrant) of non-indigenous species
			2.1.2 Trends in the abundance of introduced species, notably in risk areas
		2.2. The impact of non-indigenous particularly invasive species on ecosystems is limited	2.2.1 Ecosystem impacts of particularly invasive species
			2.2.2 Ratio between non-indigenous invasive species and native species in some well studied taxonomic groups
3. Harvest of commercially exploited fish and shellfish	Populations of selected commercially exploited fish and shellfish¹⁰ are within biologically safe limits, exhibiting a population age and size distribution that is indicative of a healthy stock	3.1 Level of exploitation by commercial fisheries is within biologically safe limits	3.1.1 Total catch by operational unit ¹¹
			3.1.2 Total effort by operational unit
			3.1.3 Catch per unit effort (CPUE) by operational unit
			3.1.4 Ratio between catch and biomass index (hereinafter catch/biomass ratio).
			3.1.5 Fishing mortality
		3.2 The reproductive capacity of stocks is maintained	3.2.1 Age structure determination (where feasible)
			3.2.2 Spawning Stock Biomass (SSB)

⁸ The term non-indigenous refers to an organism that may survive and subsequently reproduce, outside of its known or consensual range. Non-indigenous may be further characterized as un-established or vagrant, established, invasive and noxious or particularly invasive. Occhipinti-Ambrogi and Galil (2004). Marine Pollution Bulletin 49 (2004) 688–694. doi:10.1016/j.marpolbul.2004.08.011

⁹ The list of priority (indicator) species introduced by human activities will be derived by consensus, based on information from the CIESM Atlas of Exotic Species in the Mediterranean and the DAISIE project (European Invasive Alien Species Gateway) a database tracking alien terrestrial and marine species in Europe

¹⁰ The choice of indicator species for collecting information for Ecological Objective 3 should be derived from fisheries targeting species listed in Annex III of Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (species whose exploitation is regulated) and the species in the GFCM Priority Species list (<http://www.gfcm.org/gfcm/topic/166221/en>). Choice of indicators should cover all trophic levels, and if possible, functional groups, using the species listed in Annex III of SPA and/or, as appropriate the stocks covered under regulation (EC) No 199/2008 of 25 February 2008 concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy

¹¹ Operational unit is “the group of fishing vessels which are engaged in the same type of fishing operation within the same Geographical Sub-Area, targeting the same species or group of species and belonging to the same economic segment”

4. Marine food webs	Alterations to components of marine food webs caused by resource extraction or human-induced environmental changes do not have long-term adverse effects on food web dynamics and related viability	4.1 Ecosystem dynamics across all trophic levels are maintained at levels capable of ensuring long-term abundance of the species and the retention of their full reproductive capacity	4.1.1 Production per unit biomass estimates for selected trophic groups and key species, for use in models predicting energy flows in food webs
		4.2 Normal proportion and abundances of selected species at all trophic levels of the food web are maintained	4.2.1 Proportion of top predators by weight in the food webs
			4.2.2 Trends in proportion or abundance of habitat-defining groups
			4.2.3 Trends in proportion or abundance of taxa with fast turnover rates
5. Eutrophication	Human-induced eutrophication is prevented, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algal blooms and oxygen deficiency in bottom waters.	5.1 Human introduction of nutrients in the marine environment is not conducive to eutrophication	5.1.1 Concentration of key nutrients in the water column
		5.2 Direct effects of nutrient over-enrichment are prevented	5.1.2 Nutrient ratios (silica, nitrogen and phosphorus), where appropriate
			5.2.1 Chlorophyll-a concentration in the water column
			5.2.2 Water transparency where relevant
5.3 Indirect effects of nutrient over-enrichment are prevented	5.2.3 Number and location of major events of nuisance/toxic algal blooms caused by human activities ¹²		
		5.3.1 Dissolved oxygen near the bottom, i.e. changes due to increased organic matter decomposition, and size of the area concerned* ¹³	

¹²The connection between eutrophication and toxic algal blooms is subject of devoted research at the moment. The connection between the two is not clearly established as not all the ecosystems react in the same way. In fact recent surveys in UK/Ireland in the framework of OSPAR have allowed concluding on the lack of relation between the them and therefore the number and location of major events of nuisance/toxic algal blooms should always be regarded cautiously as an indicator of a direct effect of nutrient over-enrichment.

¹³Monitoring to be carried out where appropriate

6. Sea-floor integrity	Sea-floor integrity is maintained, especially in priority benthic habitats¹⁴	6.1 Extent of physical alteration to the substrate is minimized	6.1.1 Distribution of bottom impacting activities ¹⁵
			6.1.2 Area of the substrate affected by physical alteration due to the different activities ¹²
		6.2 Impact of benthic disturbance in priority benthic habitats is minimized	6.2.1 Impact of bottom impacting activities ¹² in priority benthic habitats
			6.2.2 Change in distribution and abundance of indicator species in priority habitats ¹⁶
7. Hydrography	Alteration of hydrographic conditions does not adversely affect coastal and marine ecosystems.	7.1 Impacts to the marine and coastal ecosystem induced by climate variability and/or climate change are minimized	7.1.1 Large scale changes in circulation patterns, temperature, pH, and salinity distribution
			7.1.2 Long term changes in sea level
		7.2 Alterations due to permanent constructions on the coast and watersheds, marine installations and seafloor anchored structures are minimized	7.2.1. Impact on the circulation caused by the presence of structures
			7.2.2 Location and extent of the habitats impacted directly by the alterations and/or the circulation changes induced by them: footprints of impacting structures
			7.2.3 Trends in sediment delivery, especially in major deltaic systems
			7.2.4 Extent of area affected by coastal erosion due to sediment supply alterations

¹⁴ e.g. coastal lagoons and marshes, intertidal areas, seagrass meadows, coralligenous communities, sea mounts, submarine canyons and slopes, deep-water coral and hydrothermal vents

¹⁵ e.g bottom fishing, dredging activities ,sediment disposal, seabed mining, drilling, marine installations, dumping and anchoring, land reclamation, sand and gravel extraction

¹⁶Indicator species to be used to assess the ecosystem effects of physical damage to the benthos could refer to disturbance-sensitive and/or disturbance-tolerant species, as appropriate to the circumstances, in line with methodologies developed to assess the magnitude and duration of ecological effects of benthic disturbance.

		7.3 Impacts of alterations due to changes in freshwater flow from watersheds, seawater inundation and coastal freatic intrusion, brine input from desalination plants and seawater intake and outlet are minimized	7.3.1. Trends in fresh water/sea water volume delivered to salt marshes, lagoons, estuaries, and deltas; desalination brines in the coastal zone
			7.3.2. Location and extent of the habitats impacted by changes in the circulation and the salinity induced by the alterations
			7.3.3 Changes in key species distribution due to the effects of seawater intake and outlet
8. Coastal ecosystems and landscapes	The natural dynamics of coastal areas are maintained and coastal ecosystems and landscapes are preserved	8.1 The natural dynamic nature of coastlines is respected and coastal areas are in good condition	8.1.1. Areal extent of coastal erosion and coastline instability
			8.1.2 Changes in sediment dynamics along the coastline
			8.1.3 Areal extent of sandy areas subject to physical disturbance ¹⁷
			8.1.4 Length of coastline subject to physical disturbance due to the influence of manmade structures
	8.2 Integrity and diversity of coastal ecosystems, landscapes and their geomorphology are preserved	8.2.1 Change of land-use ¹⁸	
		8.2.2 Change of landscape types	
8.2.3 Share of non-fragmented coastal habitats			

¹⁷ Physical disturbance includes beach cleaning by mechanical means, sand mining, beach sand nourishment

¹⁸ Land-use classes according to the classification by Eurostat-OCDE, 1998: <http://unstats.un.org/unsd/environment/q2004land.pdf>

9. Pollution	Contaminants cause no significant impact on coastal and marine ecosystems and human health	9.1 Concentration of priority¹⁹ contaminants is kept within acceptable limits and does not increase	9.1.1 Concentration of key harmful contaminants in biota, sediment or water
		9.2 Effects of released contaminants are minimized	9.2.1 Level of pollution effects of key contaminants where a cause and effect relationship has been established
		9.3 Acute pollution events are prevented and their impacts are minimized	9.3.1 Occurrence, origin (where possible), extent of significant acute pollution events (e.g. slicks from oil, oil products and hazardous substances) and their impact on biota affected by this pollution
		9.4 Levels of known harmful contaminants in major types of seafood do not exceed established standards	9.4.1 Actual levels of contaminants that have been detected and number of contaminants which have exceeded maximum regulatory levels in commonly consumed seafood ²⁰
			9.4.2 Frequency that regulatory levels of contaminants are exceeded
9.5 Water quality in bathing waters and other recreational areas does not undermine human health	9.5.1 Percentage of intestinal enterococci concentration measurements within established standards		
	9.5.2 Occurrence of Harmful Algal Blooms within bathing and recreational areas		
10. Marine litter	Marine and coastal litter do not adversely affect coastal and marine	10.1 The impacts related to properties and quantities of marine litter in the marine and coastal environment are minimized	10.1.1 Trends in the amount of litter washed ashore and/or deposited on coastlines, including analysis of its composition, spatial distribution and, where possible, source

¹⁹ Priority contaminants as listed under the Barcelona Convention and LBS Protocol

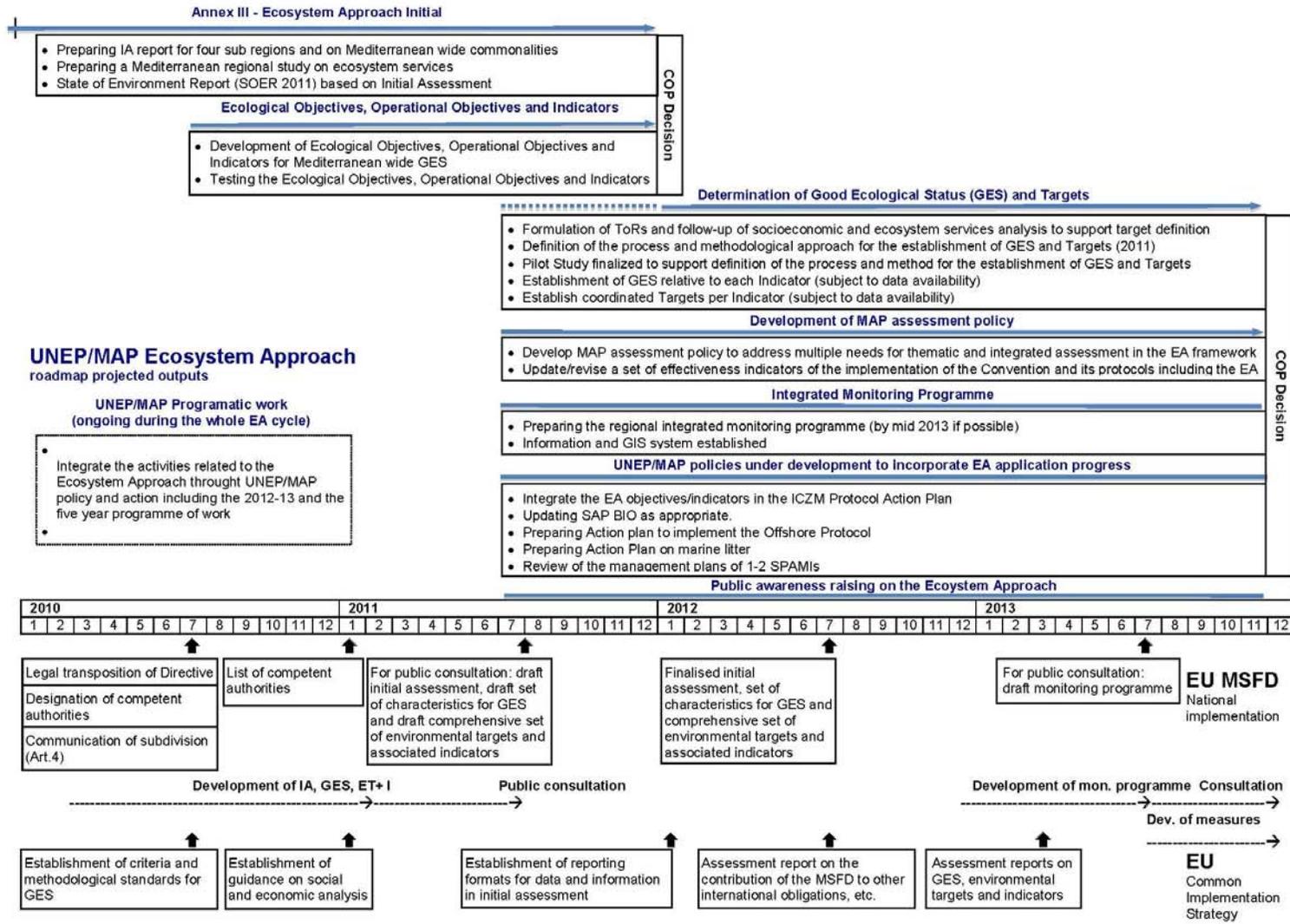
²⁰ Traceability of the origin of seafood sampled should be ensured

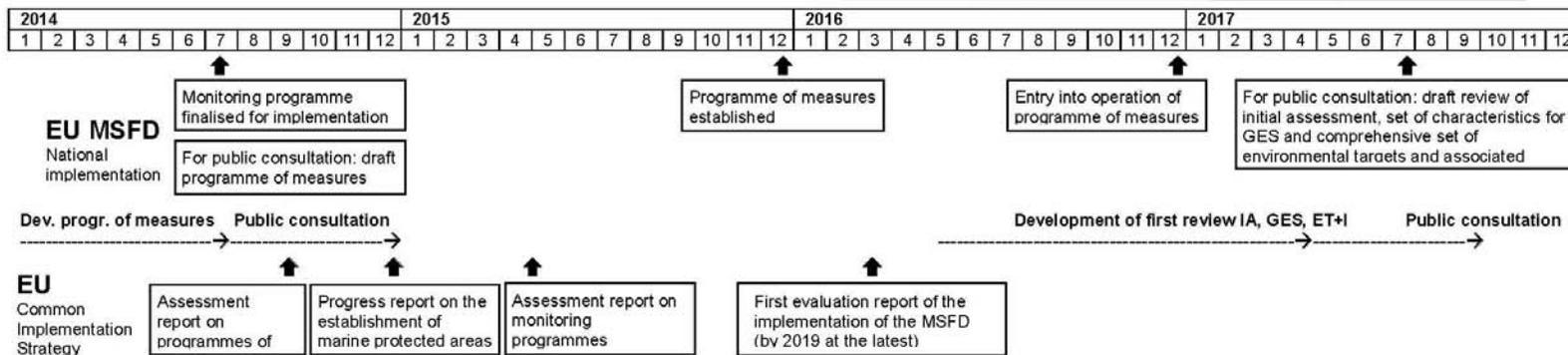
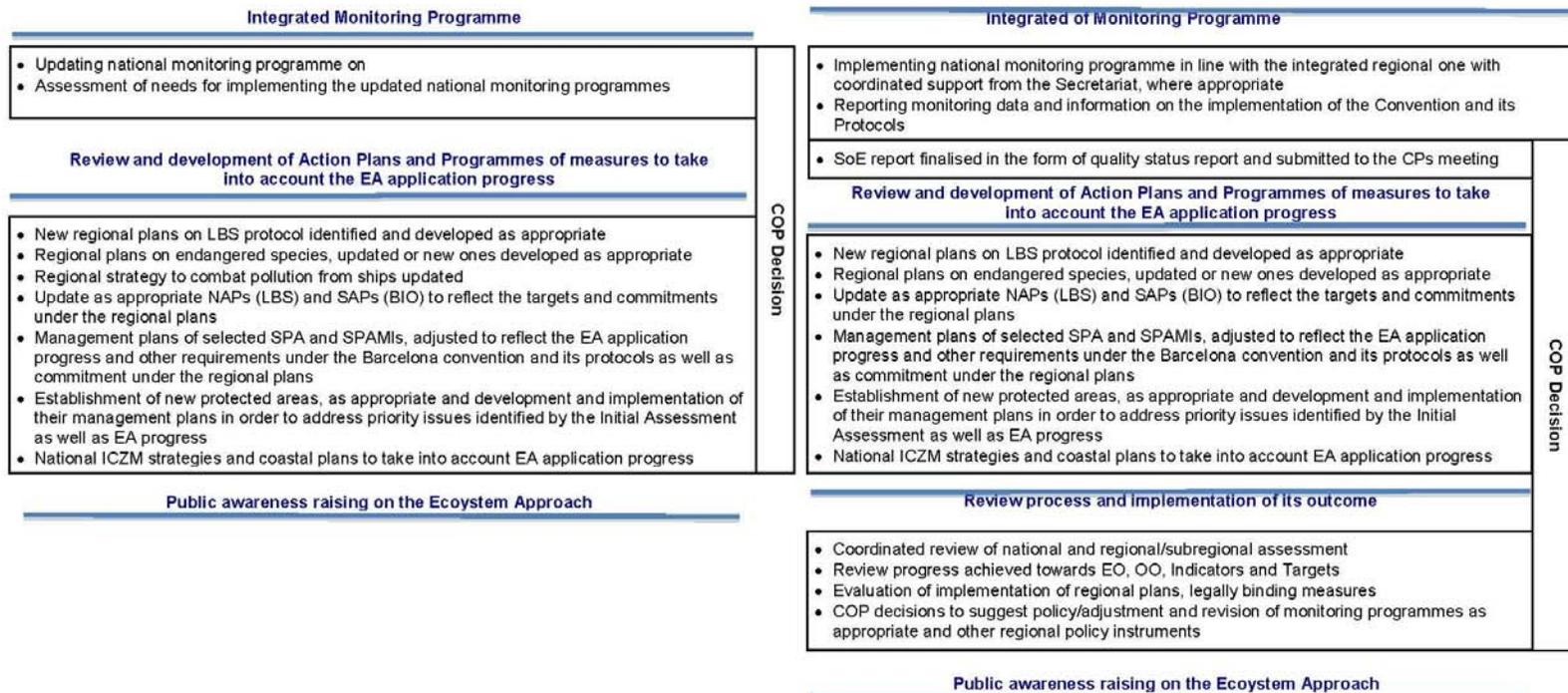
²¹ A policy document on marine litter strategy, taking fully into account the activities envisaged for the implementation of the EA roadmap, is being prepared by MEDPOL and will be submitted to the MAP Focal Point for approval. The approved document will be used as the basis for the formulation of an action plan for the reduction of marine litter.

			10.1.2 Trends in amounts of litter in the water column, including microplastics, and on the seafloor
		10.2 Impacts of litter on marine life are controlled to the maximum extent practicable	10.2.1 Trends in the amount of litter ingested by or entangling marine organisms, especially mammals, marine birds and turtles ²²
11. Energy including underwater	Noise from human activities cause no significant impact on marine and coastal ecosystems	11.1 Energy inputs into the marine environment, especially noise from human activities is minimized	11.1.1 Proportion of days and geographical distribution where loud, low and mid-frequency impulsive sounds exceed levels that are likely to entail significant impact on marine animals
			11.1.2 Trends in continuous low frequency sounds with the use of models as appropriate

²² Marine mammals, marine birds and turtles included in the regional action plans of the SPA/BD Protocol.

ANNEX 2. UNEP MAP Ecosystem Approach Roadmap (as adopted at COP17, France in February 2012)





Integrated Monitoring Programmes

- Implementing national monitoring programme in line with the integrated regional one with coordinated support from the Secretariat, where appropriate
- Reporting monitoring data and information on the implementation of the Convention and its Protocols

Development and implementation of Action Plans and Programmes of measures to take into account the EA application progress

- New regional plans based on LBS protocol identified and developed as appropriate
- Regional plans on endangered species, updated or new ones developed as appropriate
- Updating as appropriate and implement their NAPs (LBS) and SAPs (BIO) to reflect the targets and commitments under the regional plans
- Management plans of selected SPA and SPAMIs, adjusted to reflect the EA application progress and other requirements under the Barcelona convention and its protocols as well as commitment under the regional plans
- Establishment of new protected areas, as appropriate and development and implementation of their management plans in order to address priority issues identified by the EA
- National ICZM strategies and coastal plans to take into account EA application progress

Review process and implementation of its outcome

- Suggest the necessary policy adjustment as appropriate to the meeting of the Contracting Parties in 2019 with regard to, EO, OO, Indicators, Targets and monitoring programme
- Implementation of 2017 COP decisions related to the adjustment as appropriate of the regional policies, legally binding measures and monitoring programme.
- COP 2019 decision to approve the necessary updates and revisions of regional policies and targets, legally binding measures and regional plans.

COP Decision

Public awareness raising on the Ecosystem Approach

2018												2019											
1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12

EU MSFD
National implementation

Review established of initial assessment, set of characteristics for GES and comprehensive set of environmental targets and associated indicators

For public consultation: draft review of monitoring programme

Development of first review of monitoring programme

EU
Common Implementation Strategy

ANNEX 3. – SUMMARIES OF 4 WORKSHOPS

i. First Meeting – Rome, 8-9 April 2010

The First Meeting of Technical Experts on the Application of the Ecosystem Approach by MAP was held in Rome (Italy) on 8 and 9 April 2010 on the premises of the Italian Institute for Environmental Protection and Research (ISPRA).

The objective of the Meeting was to take stock of the assessments being prepared by UNEP/MAP in accordance with Decision IG 17/6, by which the 15th Meeting of the Contracting Parties (Almeria, Spain, 15-18 January 2008) decided to implement the Ecosystem Approach to the management of human activities that may affect the marine and coastal environment of the Mediterranean and adopted a road map for that purpose. The progress of the first assessments to be undertaken had been further specified by the Second Meeting of Government-designated Experts on the Application of the Ecosystem Approach by the Mediterranean Action Plan (Athens, Greece, 9 and 10 July 2008), organized with a view to the transition to Step 3 of the road map.

The meeting agreed on a number of necessary actions, with a view to completing step 3 of the ECAP Roadmap²³ agreed in Almeria by the 15th Meeting of the Contracting Parties, January 2008 and beginning the process of implementing step 4, as follows:

Assessment Process (April-July 2010)

1. With the view to finalizing the assessment by July 2010:

a) MEDPOL and SPA/RAC to:

- immediately use all available and appropriate sources of information at national and regional levels
- contact, only when it is indispensable for the purpose of the assessment, the concerned countries by 20 April 2010 at the latest, through their focal points and in cooperation with the Coordinating Unit,
- distribute a comprehensive list of the needed data, as well as the final reports prepared by the regional and national consultants
- copy to the respective country representatives participating in the present meeting all correspondence on this subject.

b) Concerned countries should be requested to provide data or appropriate sources of information by end of April 2010.

²³ The ECAP Roadmap adopted by Decision IG 19/6 of the 15th Contracting parties meeting, 2008, is made of 7 steps.

Step 1. Definition of an ecological vision (Already agreed in 2008 by the Contracting Parties)

Step 2. Setting of common Mediterranean strategic goals (Already agreed in 2008 by the Contracting Parties)

Step 3. Identification of important ecosystem properties and assessment of ecological status and pressures

Step 4. Development of a set of ecological objectives corresponding to the vision and strategic goals

Step 5. Development of operational objectives with indicators and target levels

Step 6. Revision of monitoring programmes for ongoing assessment and regular updating of targets

Step 7. Development and review of relevant action plans and programmes

2. The meeting requested all the components of MAP to provide all information available regarding their respective fields of competence, in accordance with the Table of Contents of the assessment, in particular on pressures and information arising from the high seas SPAMI project currently being implemented by SPA/RAC.
3. The first initial assessment will be based on the approved Table of Contents for the synthesis assessment document, highlighting common features among the four sub-regions and in particular interactions between status, pressures and impacts. Given the different ecological nature and condition of the four sub-regions, the assessments for each of them will be presented individually. Additionally, the assessment should consider providing information on trends wherever it is available at the regional scale, including information flowing out of impact assessments. As such, the July assessment document will present a general overview of the current environmental condition of the Mediterranean, and additional trend information where available.
4. The analysis of ecosystem services should go beyond economics and include social factors as well as elements of cost of environmental degradation and of action/inaction, building on the current analysis results and taking into account the work carried out by other organizations in this field, like the TEEB project and the Payment for Ecosystem services (PES) approach.
5. The meeting mandated the MAP Secretariat to approach regional organizations with the aim of obtaining all relevant information, optimizing synergies and avoiding duplication and overlaps for the purpose of the assessment, as well as coordinating monitoring and assessing tools and methods.
6. The assessment report will include preliminary GIS displays of key features of the Mediterranean ecosystems, major classes of threats, to the extent possible, major impacts as well as ecosystem values for the 4 sub-regions.
7. The Coordinating Unit will organize in July 2010 the Second Technical Experts Meeting that should set the working plan on the activities and necessary arrangements until the next Contracting Parties Meeting in November 2011 with regard to the implementation of Decision IG.17/6 on the ECAP. The agenda of the meeting should also include the following items:
 - a) Reviewing the assessment report for the four sub-regional areas and commonalities for the whole Mediterranean as well as GIS display of key features.
 - b) Developing a timetable for implementing the ECAP roadmap steps 4-7, for the consideration of the Government Designated Expert (GDE) meeting not later than in spring 2011.
 - c) Facilitating, on the basis of the findings of the assessment report, an exchange of views on,
 - *possible methodologies for defining ecological objectives,*
 - *ways and means to enhancing monitoring programs,*
 - *effectiveness evaluation*
 - *Transnational and sub-regional cooperation.*

Next Steps Beyond Initial Assessment (July 2010-November 2011)

1. MAP will further work to amend as appropriate and complete the assessment report on the basis of feedback provided from the July meeting, as well as from other sources such as information provided to other regional bodies, secretariats of other international conventions, EU, EEA, etc.
2. The meeting agreed that GIS should be utilized to prioritize key areas and key threats, as well as areas with the highest ecosystem service values, in order to provide the foundation for setting ecological objectives.
3. The meeting also agreed that the ecological objectives should be developed through an agreed methodology.
4. The Coordinating Unit will also hold a Government Designated Experts meeting in at the latest March -April 2011 that should consider and transmit to the MAP Focal Points Meeting in September 2011 and the Contracting Parties Meeting in November 2011 for their consideration draft decisions on:
 - the final version of the assessment
 - the timetable for implementing the ECAP roadmap;
 - the ecological objectives for the Mediterranean including proposed operational objectives and as appropriate, indicators and target levels.
5. Following the July meeting outcome, the Coordinating Unit will consider holding other meeting/s at least one in Autumn 2010, subject to available funding, in order to consult with the countries and advance on the application of ECAP in the Mediterranean through a common owned vision, objectives and programmatic approach.
6. In addition, the meeting requested the Secretariat to develop, a MAP policy on information sharing as well as, to mobilize additional resources for the implementation of the ECAP roadmap.

ii. Second Meeting – Barcelona, 6-7 July 2010,

The Second Meeting of Technical Experts on the Application of the Ecosystem Approach by MAP was held on 6 and 7 July 2010 at the invitation of the Government of Spain at the Department of Environment and Housing of the Government of Catalonia (Departament de Medi Ambient i Habitatge de la Generalitat de Catalunya), Avda Diagonal 523-525, Barcelona. The meeting was held pursuant to the decision by the First Meeting of Technical Experts on the Application of the Ecosystem Approach by MAP, held in Rome on 8 and 9 April 2010, which decided that the objectives of the second meeting would be: to advance on the finalization of the Assessment Report; and to agree on follow up actions with regard to the implementation of other steps of the road map for implementing the Ecosystem Approach by MAP and other issues, such as monitoring and assessment of effectiveness.

The Meeting agreed on a number of conclusions as follows:

1. *Assessment Report*

a. *Content*

1. The integrated Assessment Report should contain four integrated sub-regional assessment chapters and one Mediterranean-wide chapter on commonalities. Each chapter should contain conclusions and identify information gaps.
2. The integrated sub-regional chapters should follow the table of contents agreed by the July 2008 meeting of Government-designated experts. The meeting highlighted the need to include to the extent possible information on pressures on coastal areas, including particularly physical parameters and maritime activities that are not yet addressed in the current version of the assessment report.
3. With a view to ensuring consistency and coherence among the four sub-regional chapters, all elements of the table of contents should be included in each chapter irrespective of the current availability of data/information.
4. Specific information/data gaps should be highlighted with a view to indicating in which areas such gaps exist and how they should be filled.
5. The chapter on the Mediterranean-wide assessment should be drafted in accordance with the elements indicated in Annex I to these conclusions.
6. The sectoral sub-regional reports should be further developed by the respective MAP components with a view to preparing a quality status report which will be submitted to the next meeting of the Contracting Parties as the State of the Environment Report for the Mediterranean.

b. *Process*

1. The countries concerned undertake to provide comments to the draft assessment report and additional information by 30 September 2010 with a view to enabling the Secretariat to include such information, as need be, in the sectoral sub-regional reports and the sub-regional chapters of the integrated Assessment Report.
2. The revised version of the integrated Assessment Report should be sent by the Coordinating Unit by end-October 2010 for consideration by countries, including internal scientific peer review, as need be, the feedback from which should be submitted to the Secretariat by 15 December 2010, at the latest.
3. Subject to availability of resources, the final version of the report will be scientifically peer reviewed through a process to be determined by the Bureau of the Contracting Parties. The final report should be circulated by April 2011 for the consideration and finalization by the regional expert meeting scheduled in May 2011 for transmission to the meeting of MAP Focal Points, scheduled in 2011.

2. *Ecological objectives*

The 11 European Union Marine Strategy Framework Directive descriptors should be used as the basis for developing Mediterranean ecological objectives, taking also into account the issues emerging from the finalized integrated Assessment Report, socio economic considerations, ICZM and cumulative impacts to be discussed at the next meeting of technical experts on ecosystem approach.

3. *Monitoring*

MAP should develop an integrated monitoring programme in line with the ecosystem approach.

4. *Evaluation of the effectiveness of management measures*

The Secretariat should prepare a methodology based on relevant international approaches for the evaluation of the effectiveness of the management measures adopted in the framework of the implementation of the Ecosystem Approach.

5. *Timeframe for the implementation of Decision IG 17/5 on the application of the Ecosystem Approach by MAP*

The Secretariat should prepare a draft decision on the timeframe for the implementation of Decision IG 17/5 on the application of the Ecosystem Approach by MAP for discussion at the forthcoming regional meeting of experts.

The draft decision should address the remaining steps of the road map including an integrated environmental monitoring programme.

6. *Ecosystem Approach Work Plan 2010-2011*

The meeting adopted the Ecosystem Approach Work Plan 2010-2011,

iii. *Third meeting – Istanbul, 10-11 March 2011*

The Third Meeting of Technical Experts on the Application of the Ecosystem Approach by the Mediterranean Action Plan (MAP) was held on 10 and 11 March 2011 at the invitation of the Government of Turkey in Istanbul. The meeting was held pursuant to the decision by the Second Meeting of Technical Experts on the Application of the Ecosystem Approach by the MAP, held in Barcelona on 6 and 7 July 2010, which decided to hold a third meeting with the view to review progress and discuss substantive matters related to the implementation of ecosystem approach road map. The main objective of the meeting was to review and approve, as appropriate, a proposal on ecological objectives taking into account the issues emerging from the finalized integrated Assessment Report, socio economic considerations, Integrated Coastal Zone Management (ICZM) and cumulative impacts. The meeting was also expected to provide feedback and advice on the timeline prepared by the Secretariat for activities for the period 2011-2019.

The experts reviewed the proposal by the Secretariat on ecological objectives, operational objectives and indicators, as well as the timeline for the implementation of the ecosystem approach Roadmap and agreed on a number of conclusions as follows:

Ecological objectives, operational objectives and indicators

1. To approve the methodology and approach used by the Secretariat in developing the proposed ecological objectives based on the 11 EU-MSFD descriptors taking into consideration the Mediterranean specificities including the findings of the integrated assessment report, as well as the full geographic scope of the Barcelona Convention and its Protocols.
2. To recommend the submission by the Secretariat to the Government Designated Expert (GDE) meeting for their consideration of the proposed ecological objectives, along with the associated operational objectives and indicators contained in Annex to these conclusions.

3. The proposal shall be submitted on the understanding that:
 - a. *ecological objectives, operational objectives and indicators proposed do not cover issues related to monitoring and management that are to be addressed in the future under steps 6 and 7 of the ecosystem approach roadmap adopted by the Parties in Almeria in 2008. In particular, the proposed operational objectives were derived from the ecological objectives with the view to making them measurable and facilitating the choice of indicators.*
 - b. *indicators that are in brackets require further research.*
 - c. *indicators related to ecological objective 1 should take into account among others the list of endangered species (Annex II) and species for which exploitation is regulated (Annex III) of the SPA and Biodiversity Protocol of the Barcelona Convention, as well as in the respective regional plans adopted for species in the framework of this Protocol.*
 - d. *with regard to operational objectives and indicators related to fisheries and food webs [E.O.3 and E.O.4] the Secretariat will seek the inputs of the regional competent organization on fisheries GFCM and FAO before submission to the Government Designated Expert meeting. UNEP/MAP will assess the effectiveness of fisheries management systems, recognizing that the management of fisheries falls outside the scope of the Barcelona Convention. The meeting requests the Secretariat to enter into a memorandum of understanding with GFCM and FAO with a view to establishing cooperation including information and data sharing.*
 - e. *the ecological objectives regarding non-indigenous species should take into account the distinction between those introductions which can be prevented versus those beyond control (eg. Lessepsian species).*
4. Climate change is recognized as a critically important phenomenon, influencing the functioning of marine and coastal systems. In order to further integrate climate change effects in the ecosystem approach every effort will be made to monitor climate change effects, and, where possible, impacts on ecosystems, within the scope of proposed indicators.

Timeline for implementing the ecosystem approach

5. The meeting reviewed and approved in principle the proposed timeline and outputs for implementing the ecosystem approach subject to the amendment of document (DEPI)/MED WG.355/4 page 2; it requested the addition of the timeline for developing a common methodology for the determination of GES (2011-2012), along with a reference to targets rather than environmental targets.
6. The meeting suggested to include these outputs in the MAP programme of work; the outputs and the timeline in the draft decision for submission to the GDE meeting and the Contracting Parties meeting.
7. The meeting, recognizing the importance of technical assistance for implementing the ecosystem approach roadmap as well as the role of the Secretariat in providing it, requested the Secretariat to coordinate the process. The participants acknowledged that this will require substantive external financial resources which are necessary to continued progress in the implementation of the ecosystem approach. The development, in a coordinated manner, of common methodologies for the determination of good environmental status and targets should be considered a top priority. Efforts should be made to advance as much as possible during the current biennium.

Assessment report

8. The peer reviewed assessment report should be submitted to the GDE meeting with the proposed changes as highlighted by GESAMP.

iv. Fourth Meeting – Durres, 2-3 June 2011

The Fourth Meeting of Government-Designated Experts on the Application of the Ecosystem Approach by the Mediterranean Action Plan (MAP) was held on 2 and 3 June 2011 at the invitation of the Government of Albania in Durres. The meeting was held in order to further review and discuss the progress achieved during the current biennium in the preparation of the Integrated Assessment Report as well as the proposals regarding ecological objectives (EOs), operational objectives (OOs) and the associated set of indicators. The review and discussions were based on the outcomes of the previous three Meetings of Technical Experts, including the long-term timeline for activities related to the application of the Ecosystem Approach. The ultimate goal of the meeting was to agree on the elements of a draft decision to be submitted for consideration at the forthcoming meeting of Focal Points covering the integrated assessment, the set of EOs, OOs and Indicators and the major outputs of the ecosystem approach timeline.

The experts reviewed:

- *the draft integrated assessment report;*
- *the proposal on MAP/Barcelona Convention ecological objectives, operational objectives and indicators;*
- *the proposed indicative timeline and projected outputs for the implementation of the ecosystem approach Roadmap; and*
- *the proposed elements for the draft decision of the 17th Contracting Parties meeting regarding the ecosystem approach*

The meeting agreed on a number of conclusions as follows:

1. Integrated Assessment report

- 1.1 to endorse the submission of the Integrated Assessment report to MAP Focal points meeting after reflecting the suggestions made at the meeting and those to be suggested by the Contracting Parties, if any, as soon as possible and not later than 15 June 2011; including the editorial and technical amendments suggested by GESAMP.
- 1.2 to request the Secretariat that an executive summary for policy makers is included in the SoE report
- 1.3 to request the Secretariat to distribute the French version of the report at least one month before the MAP Focal Points meeting;
- 1.4 to appreciate and acknowledge the advice given by GESAMP, in particular those related to linkage of the assessment in the future with other assessment regional processes and the UN Regular Process for global reporting and assessment of the state of the marine environment.

2. Ecological objectives, operational objectives and indicators

- 2.1 to endorse the revised version of the ecological objectives, operational objectives and indicators for submission to the MAP Focal Points meeting consideration as presented in Annex I to these conclusions;

2.2 to request the Secretariat to

- a) *fully integrate the agreed ecosystem approach indicators in the MAP/Barcelona Convention action plans, including the ICZM and, Marine litter;*
- b) *prepare explanations on the rationale and methodology of the determination of ecosystem approach indicators including the determination of GES and targets and draft a glossary of terms used for ecological, operational objectives and indicators*
- c) *make all efforts to ensure coherence of the 2012-2013 PW with the progress achieved in the implementation of ecosystem approach and new activities to be implemented*
- d) *make cross reference in the 2012-2013 PW and budget in order to show the contribution to the implementation of ecosystem approach.*

3. Timeline for implementing the ecosystem approach

3.1 to endorse the proposed indicative timeline with projected outputs of the ecosystem approach roadmap implementation for submission to the MAP Focal Points meeting. The timeline to be revised as need be to take into account the progress achieved on biannual basis and feed the preparation of the biannual Programme of work of MAP;

3.2 to request the Secretariat to:

3.2.1 amend the proposed timeline presented in document WG 360/6 in order to include the following issues suggested by the meeting:

- a) *formulation of ToRs for socio-economic analysis during the current biennium*
- b) *advancing in early 2013 the preparation of integrated monitoring programme;*
- c) *better clarification of the outputs to be achieved at the regional and national levels;*

3.2.2 circulate as soon as possible through email the revised timetable based on the above elements to all participants for final adoption.

3.2.3 allocate in the proposed programme budget of MAP 2012-2013 the necessary resources from the MTF and external ones for the ecosystem approach implementation. For this purpose the meeting highlighted the need to develop a resource mobilization strategy for implementing MAP PW including the outputs related to ecosystem approach for consideration by the MAP focal points meeting.

Elements for the draft decision on ecosystem approach

To agree on the proposed elements as presented in appendix II to these conclusions that address the following issues raised during meeting discussions:

Preamble:

- *To also refer to the 5 year PW of MAP, MSSD, ecosystem approach related CBD decisions and GFCM work on ecosystem approach by fisheries;*

Operational part:

- *To clarify that any endorsement of the timeline and proposed projected outputs beyond 2014 is for indicative purposes;*
- *To add to the mandates of the Secretariat the work on socio economic analysis*
- *To add new bullets requesting the Secretariat to ensure coherence throughout MAP/Barcelona convention work including the 5 and 2 year programme of work as well as MAP regional policies and action plans, with the ecosystem approach progress and outcome;*
- *To add a new bullet at the end of the draft decision to invite the Contracting parties and donor agencies, including the financial organizations and the EU to support financially the implementation of the ecosystem approach*

Proposals on major elements for the draft decision on the ecosystem approach implementation

Preamble part:

- To recall the objectives of MAP and the Barcelona Convention obligations;
- To recall Decision IG 17/6 on Ecosystem approach;
- To refer to the MSSD and the 5-year programme of work;
- To acknowledge the need for synergy to the extent possible with regional processes in particular the MSFD and GFCM
- To acknowledge the need for synergy to the extent possible with global (CBD, UN regular Process for Global reporting and assessment of the state of the marine environment, UN Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction, UNEP Regional seas)
- To acknowledge the progress achieved at technical level and by Government-designated Experts Group supported by the Secretariat for the implementation of the ecosystem approach during the current 2010-2011 biennium;
- To take note of Reports of technical Working Groups and GDE meetings;
- To recognize the need for substantive additional resources to support the ecosystem approach application process also by means of its inclusion in the forthcoming Resource Implementation Strategy.

Operational part:

The meeting of the Contracting Parties will be invited to:

1. Endorse the integrated assessment report;
2. Approve the Ecological objectives associated by Operational objectives and Indicators as presented in the tables of Annex I to the Decision;
3. Agree on the timeline and projected outputs of Ecosystem approach roadmap implementation 2012-2019 to be updated on biannual basis as need be in order to take into account the progress achieved;

4. Mandate the Secretariat to work, in cooperation with Contracting Parties, Partner competent organizations and scientific community on the:
 - a) Formulation of an integrated monitoring programme based on ecosystem approach for the consideration of the Contracting Parties meeting in 2013; including the finalization of Info system in support of ecosystem approach
 - b) Determination of GES and targets for the agreed indicators, as appropriate, for the consideration of the Contracting Parties meeting in 2013.
 - c) Socioeconomic analysis for the consideration of the Contracting Parties meeting in 2013.

The meeting of the Contracting Parties will be also invited to:

- a) Extend the mandate of GDE and associated technical Working Group to continue the implementation of ecosystem approach roadmap in accordance with the 2012-2013 programme of work of MAP.

The meeting of the Contracting Parties requests the Secretariat to:

- *Take the necessary actions under the leadership of the UNEP/MAP Coordinating Unit for implementing this Decision throughout MAP/Barcelona Convention related activities and integrate it in its 5 year and 2 year Programme of work;*
- *Ensure that MAP/Barcelona Convention regional policies become coherent with the ecosystem approach progress and outcome;*
- *Undertake under the guidance of the Bureau of the Contracting Parties the necessary analysis to enhance MAP governance structure with the view to implementing the ecosystem approach for the consideration of the 18th meeting of the Contracting Parties.*

The meeting of the Contracting parties will invite the Contracting Parties and the Secretariat to mobilize resources for supporting financially the application of ecosystem-based management approach by MAP as a means to effectively achieve the objectives of MAP/Barcelona Convention.