

Introduction

1. The Third 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 at the Vila Belvedere Hotel, 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 EO, OO and Indicators and the major outputs of the ecosystem approach timeline.

Participation

2. The meeting was attended by Government-Designated experts from the following Contracting Parties: Albania, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, European Commission, France, Greece, Israel, Italy, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain and Turkey.

3. The Coordinating Unit for the UNEP/Mediterranean Action Plan, MED POL Programme (MEDPOL), 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) and the Cleaner Production Regional Activity Centre (CP/RAC) were also represented at the meeting.

4. The following institutions and organizations were represented by observers: European Commission Joint Research Centre, the General Fisheries Commission for the Mediterranean – Food and Agriculture Organization (GFCM-FAO), the Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE) and World Wide Fund for Nature (WWF).

5. The list of participants is attached as **Annex I** to this report.

Agenda Item 1-2: Opening of the Meeting, election of officers and adoption of the agenda

6. The meeting was opened at 9.00 a.m. on Thursday 2 June 2011 by Ms Maria Luisa Silva Mejias, MAP Coordinator. Ms Silva welcomed the participants and thanked the Ministry of Environment, Forests and Water Administration of Albania for hosting the meeting. Recalling the decision adopted by the 15th Meeting of the Contracting Parties in 2008 (Decision IG 17/6) to progressively apply the Ecosystem Approach to the management of human activities that may affect the Mediterranean marine and coastal environment for the promotion of sustainable development according to a 7-step road map, Ms. Silva reviewed the objectives of the meeting in consideration of: (i) the Initial Assessment, (ii) the Ecological Objectives, Operational Objectives and Indicators as discussed in the previous Meeting of Technical Experts, (iii) the timeline for the further application of the Ecosystem Approach and (iv) the elements to be contained in a draft decision on the Ecosystem Approach to be considered in the meeting of the MAP focal points.

7. Mr. Pellumb Abeshi, General Director of the Ministry of Environment, Forest and Water Administration welcomed the participants and thanked the MAP Secretariat for the work done in the preparation and organization of the meeting. He highlighted the involvement of Albania in the Barcelona convention and its protocols and the engagement in several related processes. He also briefed the participants in the work done in Albania in protection of the environment with special mention on the progress made in waste water and solid waste management. He concluded his intervention stating, on behalf of the Albanian Government, the commitment of the Ministry of Environment, Forests and Water Administration towards the Barcelona Convention and its protocols implementation and sustainable development.

8. Following informal consultations, the meeting elected its officers as follows:

Chairperson:	Ms. Etleva Canaj (Albania)
Vice-Chairpersons:	Mr Larbi Sbai (Morocco) Mr Raphaël Simonet (Monaco)
Rapporteur:	Mr Mohamed Abdel Monem Farouk Osman (Egypt)

9. The meeting adopted the agenda set out in UNEP(DEPI)/MED WG 360/1 highlighting that under agenda item 6 a discussion on the arrangements necessary to implement the ecosystem approach timeline would be also held. The Agenda of the meeting is contained in **Annex II** to the present report.

Agenda Item 3: Progress in implementation of the Ecosystem Approach roadmap

10. The Secretariat provided an update on the progress of the Ecosystem Approach roadmap since the 2nd Government-designated Expert Meeting held in July 2008. Emphasising the major results achieved as contained in document UNEP(DEPI)/MED WG.360/3. The excellent team spirit and effective cooperation of all MAP components involved in the process under the leadership of Coordinating unit and the contracting parties.

11. Participants asked several questions with regard to the incorporation of the substantive comments received from GESAMP on the Initial Integrated Assessment Report, the terms of reference of the pilot study on ecosystem approach, the links to the EU Marine Strategy Framework Directive and global marine reporting efforts (Regular Process) and the synergies between the Ecosystem Approach process and the European Environmental Agency Shared Environmental Information System (SEIS) as well as the calendar for the production of the State of the Environment Report of the Mediterranean and the establishment of Good Environmental Status (GES).

12. The Secretariat provided the clarification required regarding that the Initial Integrated Assessment Report, which had been already modified to reflect the most substantial comments received from GESAMP and the Contracting Parties, and that would be further reviewed in detail in the weeks following the meeting, will be used as the knowledge and information base of the production of SoER during the second half of 2011. Finally the Secretariat added that the process for the establishment of GES had been included in the future work to be done in order to achieve the goals set for the Ecosystem Approach as reflected in the timeline.

13. Finally several representatives asked to streamline terminology regarding GES and ensure that there is common understanding of the terms used in the further application of the Ecosystem Approach.

14. Following a comment by the floor, the Secretariat acknowledged the need to improve the quality of the French version of the documents for the future meeting.

Agenda Item 4: The Initial Integrated Assessment of the Mediterranean Sea as reviewed by GESAMP

15. The Secretariat presented briefly the progress made on the finalization of the Integrated Assessment Report including the major comments received from GESAMP and gave an overview presentation of the key findings of the report (UNEP(DEPI)/MED WG.360/5).

16. The Coordinator commented the relation between the Integrated Assessment and the “UN regular process for global reporting and assessment of the state of the marine environment, including socio-economic aspects (Regular Process)” highlighting that both had developed under different frameworks but emphasizing the possibilities for convergence given that the regular process will have a regional approach where a close connection with UNEP/MAP will be developed. The focus on socioeconomic activities of the regular process will have to be matched by MAP by placing more emphasis on this aspect in future processes.

17. One representative pointed out the privileged position of UNEP/MAP to influence and contribute to the Regular Process and make sure there is a tight link to UN-DOALOS in the next steps in the coordination, format and compilation of the first initial global assessment as the Mediterranean will be included as part of the North Atlantic region in the Regular Process being the only Regional Sea of that region that has a UNEP administered secretariat.

18. Thanking the Secretariat for the efforts made in improving the assessment report, several representatives, informed that they would provide further comments to the version of the Integrated Assessment Report circulated prior to the meeting in 15 days as agreed by the meeting.

19. The important role of the Initial Integrated Assessment for the progress of the Ecosystem Approach and the need to establish the links to other policy tools of MAP was clearly pointed out by several participants.

20. Clarification was also requested on the process for drawing the major conclusions of the integrated assessment report, which were adequate, and of the inclusion of information on the drivers, the cost of degradation and the major knowledge gaps. In response, the Secretariat explained that the conclusions of the Integrated Assessment Report and the lessons learnt out of it will be certainly taken in consideration in the coming steps of the Ecosystem Approach and that further iterations of assessment are foreseen in the timeline. Following the guidance provided by GESAMP, an effort had been made into clearly linking the concluding and gap analysis section of each of the sub regional chapters with the Mediterranean wide conclusions and gaps were highlighted in Chapter 1 and in the Executive Summary. The information on the cost of degradation and specially the economical benefit and value of the services provided by different key ecosystems in the Mediterranean had been tackled in the report compiled by BP/RAC at a regional level which posed a challenge for its integration in the Integrated Assessment Report that has a sub regional structure.

21. Following a question from the floor regarding the publication of the integrated assessment report, the Secretariat informed that being a technical report for an expert audience it will be made available on the internet (and/or published as a technical series report), once it would be finalized. The Integrated Assessment Report would be the basis of the forthcoming State of the Environment Report for the Mediterranean that would be addressed at a wider audience, including policy makers, and would be published. It was planned that The State of the Environment Report would include an Executive Summary for policy makers.

22. It was pointed out that it would be desirable to ensure that the forthcoming State of Environment Report is well structured in order to link the key findings of the Initial Integrated Assessment and include information on drivers, knowledge gaps and the cost of degradation.

23. Finally one representative asked for the availability of the French version of the integrated assessment report and offered the assistance of the Member States in producing a good French version. The Secretariat stated that once the report is translated it will be sent to the Member States for comments for a period of one month.

Agenda Item 5: Proposed Mediterranean ecological objectives associated with its operational objectives and indicators

24. After a brief introduction on methodology, the Secretariat presented one by one each of the Ecological Objectives with the associated Operational Objectives and Indicators, with special emphasis on the modifications proposed by the Contracting parties after the third meeting of the technical experts on ecosystem approach held in March 2011 in Istanbul, Turkey as well as by GFCM (Document UNEP(DEPI)/MED WG.360/4).

25. The meeting reflected on several generic aspects relevant for the whole set of Ecological Objectives, Operational Objectives and Indicators. Several representatives commented on the management implications of the Operational Objectives, the need to maintain coherence and avoid repetition between the Ecological Objectives and the corresponding set of Operational Objectives and the consideration of the incorporation of certain indicators relevant for the monitoring of the achievement of the objectives even if the data is not widely available. Two representatives added that indications on the data availability and the means to obtain the data that is missing should be included in the text accompanying the tables.

26. The Secretariat welcomed the comments and clarified that the Operational Objectives have no management implications but are a mere breakdown of the ecological objectives for action purposes to operationalize. The discussions of management measures will be undertaken once the Ecological Objectives, Operational Objectives and Indicators are clearly defined and the process for the establishment of targets is concluded. Similarly, the discussion on how the necessary data will be collated and which are the indicators for which information is already available and which will need additional monitoring schemes to be put in place will be discussed at a later stage.

Biodiversity

27. During the discussion of the specific wording of the Ecological Objective on biodiversity several representatives discussed the need to make reference to “maintain and/or enhance biological diversity” and the suitability of using the term “terrestrial” in order to further define which species and habitats would be monitored in the coastal zone. It was reasoned and agreed that the option of maintaining or enhancing should be given as one or the other may apply depending on the initial status. It was also agreed that the addition of an explanatory note with the definition of the term “coastal” according to the ICZM Protocol would suffice to clarify which species and habitats should be included.

28. With regards to the operational objectives and Indicators several representatives argued the need to include species and habitat condition even if not all the necessary information is nowadays available. Several representatives also argued the potential use of the area of Marine Protected Areas (MPAs) as an indicator. The meeting agreed with the argumentation on the need to capture the species and habitat condition and the necessary

modifications were implemented. The Secretariat clarified that the area of MPAs is clearly related to management and that this kind of indicator may be included at a later stage when the need to monitor management measures is present. Finally a discussion was held on the need to specify if the indicators had to reflect trends or changes considering as well the availability of data and the meeting agreed after clarification by the Secretariat that a clarification on the need to capture trends for all the indicators would be added in the introductory text that would accompany the definitive version of the tables.

Non-indigenous species

29. The discussion touched upon the need for clarification of the terms “non-indigenous” and “invasive” species and which would be the priority species. Several representatives discussed also the wording of the Ecological Objective with regards to the suitability of using the sentence “to the maximum extent possible”. The Secretariat proposed to add a footnote providing a clear definition for the terms non-indigenous and invasive and clarifying which would be the criteria used for priority species. The meeting agreed to remove the sentence “to the maximum extent possible” for the sake of clarity of the ecological objective and under the understanding that certain introductions were difficult to control.

30. It was agreed to modify the Operational Objectives in order to ensure that the focus of both objectives would be directed to invasive and particularly invasive species. Several representatives commented on the need to make the Indicators more specific. In this regard it was discussed the need to facilitate prioritization by maintaining mention to “risk areas” despite the fact one representative had originally enquired about the purpose of adding this precision.

Harvest of commercially exploited fish and shellfish

31. A discussion on the value of the text accompanying the tables took place with several representatives emphasizing the value of the information included but the difficulty of analysing it in depth in the present meeting. The meeting pointed out that the explanatory text had to be removed for the time being and only those paragraphs relevant for the clear definition of Ecological Objectives, Operational Objectives and Indicators should be kept as footnotes. In this sense the information relative to the indicator species of fish and shellfish relevant for Ecological Objective 3 was moved to a footnote. A discussion on the convenience of changing the terms “fish and shellfish” by “living resources” was also maintained but the meeting finally agreed to stick to the original terminology employed. Two representatives made reference to the fact that the use of commercially exploited fish and shellfish species did not allow to include as part of the work of this objective the illegal, unreported and unregulated fishing and that probably did not sully consider coastal traditional fisheries.

32. The following discussion on the Operational Objectives and Indicators led to the replacement of the term “pressure” by “exploitation” in Operational Objective 3.1 as this is a more accurate term in view of the indicators proposed. Several representatives discussed the use of the term “operational unit” instead of “fishery”. The use of “operational unit” was agreed after some discussion and clarification by the representative of the GFCM on the soundness of using a common terminology that is clearly defined and the added value of the fact that “operational unit” includes information on bycatch and discards. With regards to the indicators the simplification of the wording of indicator 3.1.4 by removing “for selected indicator species at each trophic level” and the inclusion of an indicator on fishing mortality (3.1.5) in order to have a better grasp of the “biologically safe limits” were proposed and accepted by the meeting.

Marine food webs

33. The discussion on marine food webs ensuing touched only upon the Indicators related to Operational Objective 4.2. The rewording of Indicator 4.2.1 in order to better define “large fish... at the top of food webs” by using the term “top predators” was proposed and accepted. Further the breakdown of Indicator 4.2.2 into two Indicators to clearly differentiate between “habitat-defining groups” and “taxa with fast turnover rates” was proposed and accepted by the meeting.

Eutrophication

34. The meeting discussed the suitability of changing the term “minimized”, used in both the Ecological Objective and the Operational Objective, by the term “prevented” in order to better define the objectives. With regards to Operational Objective 5.2 and 5.3 two representatives discussed the need for clarification on when the effects had to be prevented and it was agreed that it was understood that all objectives were designed in order to address situations where there is a reason for concern.

Sea floor integrity

35. Several representatives discussed the wording of the Ecological Objective and the implications of removing the reference to “to the maximum extent possible” in order to increase the clarity of the objective. It was argued that the prioritization of the Ecological Objective would be given by focusing on the certain habitats where the integrity is to be maintained and proposed to replace all references to “key” habitats by referring to “priority” habitats. For the sake of simplicity it was also agreed to move the listing of priority habitats to an explanatory footnote.

36. With regards to the Operational Objectives several representatives noted that the term “damage” and the reference to “kept within acceptable limits” in Operational Objective 6.1 were not clearly defined and it was proposed to replace them by “alteration” and “minimized”.

37. With regard to indicators several representatives proposed to harmonize the list of bottom impacting activities for all indicators. After clarification by the Secretariat and a proposal by the floor it was agreed that the list would be moved to a footnote common to all indicators. Different representatives noted that the list needed to be completed by adding activities such as sediment disposal, marine installations related to offshore activities and land reclamation. Further several representatives discussed the need to clearly differentiate the indicators related to the physical alteration of the substrate (Operational Objective 6.1) from those related to the impact on benthic habitats and communities (Operational Objective 6.2) and requested clarification on the terms “quantification of damage” and “footprint”. The Secretariat clarified that the quantification referred to the monitoring of the area affected by physical alteration and that footprint referred to impact on biota. It was therefore proposed to reword indicators 6.1.2 and 6.2.1 in order to reflect these clarifications and emphasize the different focus of the Operational Objectives.

Hydrography

38. The meeting engaged in a discussion around the suitability of Operational Objective 7.1 dealing with climate change and climate variability. The discussion was centred on how much of the impact is related to human activities and how realistic was to take measures to change that. Finally the meeting agreed that the focus had to be placed on the minimization of the impact and not the causes of that impact, which are beyond the scope of the MAP/Barcelona Convention, and therefore it was decided to maintain the wording of

Operational Objective 7.1. It was also said that even if the identification of measures was difficult it was important to retain indicators to monitor the changes and therefore foresee potential impacts.

Coastal areas

39. The discussion touched on the intrinsic relationship between this Ecological Objective and the Action Plan on Integrated Coastal Zone Management (ICZM) and the need to better define Operational Objective 8.2 including the suitability of introducing consideration to the coastal landscapes as part of it. Several representatives commented that the full development of this Ecological Objective had to be synchronized with the action plan on ICZM. The Secretariat clarified that the Action Plan on ICZM was a programme of measures and that could be used to further implement the objectives of the ecosystem approach but that in fact the development of the objectives could be furthered prior to the finalization of the Action Plan on ICZM.

40. A small working group was mandated to draft a consensual proposal to take into account diverse opinion expressed during discussions by several representatives. It was noted that due to the specificity of the Operational Objective and Indicators and the recent development of the ICZM protocol further work was needed with regards to the Indicators proposed for Operational Objective 8.2; to consider the need to address beyond habitats and ecosystems also coastal landscapes with a perspective on the sustainability of coastal development. The relevance of the Indicators with regards to the coastal geomorphology and ecosystems was questioned while other representatives noted that it was important to clearly define the area of the coastal ecosystems that had to be managed. Discussions about the potential of using coastal landscapes in order to integrate the cultural and socioeconomic aspects of the coastal zone as part of this objective were also held.

41. The meeting reached agreement for the first part of the wording of the Ecological Objective dealing with coastal dynamics and ecosystems approved Operational Objective 8.1 and its Indicators. Following a Secretariat proposal, the meeting mandated the latter to draft a final proposal based on their discussions with regard to Operational Objective 8.2 and its indicators which was agreed by electronic means after the meeting.

Pollution

42. The discussion addressed two major aspects related with this Ecological Objective. Several representatives argued that underwater noise deserved being treated separately, and not as part of the Ecological Objective dealing with pollution, as it was thematically and technically different enough plus it had no impact on human health. The meeting agreed to this proposal and a separate Ecological Objective on "Energy including underwater noise" was added after the last Ecological Objective using the same set of Operational Objectives and Indicators. The second aspect discussed in relation with the Ecological Objective was the need to add mention to the coastal ecosystems besides the marine ones, which was agreed by the meeting. A discussion on the reference to ecosystems or habitats was also held but it was finally decided to keep reference to ecosystems in order to ensure that the impact on biota is well considered.

43. With regard to the Operational Objectives, several representatives requested clarification of the terms "priority contaminants" and if "acute pollution events" also included other events not related to hydrocarbon spills that is the traditional understanding of the term. The Secretariat proposed to include an explanatory footnote making reference to the fact that the contaminants considered as a priority would be those listed as such under the Barcelona Convention and the 1996 Land Based Sources and Activities Protocol and clarified that acute pollution events include also those involving other hazardous substances beyond

hydrocarbons. It was also added that these events should also include pollution accidents on land within the Mediterranean watershed and emphasised the need to precise the wording of this Operational Objective (9.3) by making reference to the prevention of the events and the minimization of its impacts that was accepted by the meeting.

44. With regards to the Indicators several precisions were made. For Indicator 9.4.1 a discussion was held on the need to ensure the traceability of the seafood sampled for harmful contaminants in order to facilitate the design of corrective measures. The meeting decided to include a footnote to this respect. A correction was also proposed for indicator 9.5.1 where the use of “intestinal enterococci” was recommended in place of “faecal streptococci” in order to follow the most commonly used indicator in other instruments (i.e. MSFD).

45. Finally, several representatives engaged in a discussion on the need to define clearly the geographical scope of the Ecosystem Approach, as the meaning of recreational areas or if the transitional waters located landward of the coastal waters would be included as part of the objective. The Secretariat clarified that this first attempt to define the Ecosystem Approach would be revised as the implementation progresses and its application through time would provide elements to further refine scope and eliminate uncertainties.

Marine litter

46. The discussion focussed mainly on the wording used in the Ecological Objective and the connection of this objective with other UNEP/MAP processes and instruments. With regards to the wording of the Ecological Objective it was proposed that for coherence and inclusiveness purposes it would be desirable to refer to the “coastal and marine environment” instead of “biodiversity and ecosystem services”. The proposal was accepted by the meeting. Two representatives proposed to include references to the Marine Litter Strategy being developed by MEDPOL as a guiding document for this objective and to the SPA/BD Protocol with regard to the impact of marine litter in mammals, marine birds and turtles (Indicator 10.2.1). The Secretariat noted the need for such references that were included as footnotes. Finally a discussion on the need to better define or precise the term “marine litter” was held by several representatives but the need was disregarded after clarification by the Secretariat on the fact the term “marine litter” was clearly defined by UNEP.

47. Finally once the discussion on ecological, operational objectives and indicators were concluded, the meeting emphasized that the further development of the Ecological Objectives had to be clearly included in the UNEP/MAP Programme of Work. It would be desirable that ecosystem services and socioeconomic implications would also address as part of the Ecosystem Approach alongside with considerations for ecosystem restoration. The Secretariat clarified that the Ecosystem Approach is an overarching principle for UNEP/MAP activities and that the integration within the Programme of Work and the planning for the activities related to it would be discussed in the following agenda point on the timeline for implementing the Ecosystem Approach roadmap.

Agenda Item 6: Proposed timeline for implementing UNEP/MAP ecosystem approach roadmap in synergy with MSFD

48. The Secretariat explained the rationale and the major outputs and their timeline as proposed in the document UNEP(DEPI)/MED WG.360/6.

49. Representatives pointed to the importance of the agreed ecological objectives, operational objectives and indicators for all MAP-Barcelona Convention activities. Their relevance in prioritizing future work as well as in pursuing synergies and coherence with

other MAP initiatives, such as the Action Plan on ICZM was also emphasized. Discussion also took place on the costs associated with the implementation of this programme of work and the need for additional resources. In this context several participants suggested that links with the activities included in the next biennium Programme of Work be clearly made and external resources be mobilized on a priority basis for its implementation. The meeting also concluded that in the short-term, that establishment of GES and targets, launching work on the socioeconomic analysis and monitoring needs are addressed as a matter of priority.

Agenda Item 7: Draft decision on the further application of the ecosystem approach in the Mediterranean

50. The Secretariat presented the potential elements of the decision. The ensuing discussion touched upon several aspects of the elements of the draft decision that were distributed to participants.

51. Several representatives proposed the addition of elements to the preamble part of the decision as references to the 5 year POW and the Mediterranean Strategy for Sustainable Development (MSSD) and to make mention of the need for synergy also with processes such as the Convention on Biological Diversity and the Ecosystem Approach to fisheries management of the GFCM. Reference to the need of substantial resources to support the ecosystem approach application process should be made in both preamble and operational part of the draft decision.

52. With regard to the operational part several representatives pointed out that the timeline and projected outputs for 2012-2013 should not be approved for indicative purposes but should be definitive. It was also proposed that the reference made to the need for INFOMAP to be fully operational in order to support the implementation of the integrated monitoring programme be included as part of the work that the Secretariat had to do in cooperation with the Contracting Parties and competent Partners in order to formulate a monitoring programme including an Info system to support it. It was also emphasised that it would also be necessary to include a mandate to work in the socio-economic analysis.

53. Several representatives commented on the need to differentiate between technical experts and the Government-designated experts meetings with respect to the element of the decision whether the preparation of a strategic plan for the application of the Ecosystem Approach implying the involvement of all UNEP/MAP components was needed. Finally it was agreed that the following elements would be modified or added regarding (i) the implementation of this decision through the activities of MAP/Barcelona Convention and its integration in the 5 year and the 2 year Programme of work, (ii) ensuring the coherence of the regional policies with the ecosystem approach progress and outcome (iii) consideration, under the guidance of the Bureau of the Contracting Parties, of the enhancement of MAP governance structure with the view to implementing the ecosystem approach and iv) highlighting the central role of the GDE group in guiding the MAP Secretariat work in this respect. It was agreed that the draft decision is revised to take in consideration the above discussions.

Agenda Item 8: Adoption of conclusions and recommendations

54. The meeting considered the draft conclusions prepared by the Secretariat.

55. A request to the Secretariat to prepare a document including the methodology and rationale for development of the indicators but the preparation of a glossary of the terms used was proposed by one representative and accepted by the meeting. One representative enquired about the process to discuss these documents.

56. With regards to the conclusions related to the timeline for implementing the ecosystem approach a discussion was held on the need to ensure that the plan for the biennium 2012-2013 is definitive and the mechanisms for its implementation are put in place. In this respect several representatives requested to have a cost estimate of the activities planned in order to be able to identify funding sources. The Secretariat proposed to include elements in the conclusions stating clearly that efforts had to be done to (i) ensure coherence of the 2012-2013 PoW with the progress achieved in the implementation of ecosystem approach making reference to both in the PoW and budget to which activities contribute to the implementation of the ecosystem approach and (ii) allocate in the proposed programme budget of MAP 2012-2013 the necessary resources from the Mediterranean Trust Fund 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 PoW including the outputs related to ecosystem approach for consideration by the MAP focal points meeting.

57. The final version of the conclusions, as edited to reflect the comments and requested modifications and circulated to participants shortly after the meeting, is contained in **Annex III** to this report together with the final agreed version of ecological objectives, operational objectives and indicators, the ecosystem approach timeline as well as the elements for the draft decision of the contracting parties on ecosystem approach. The draft report of the meeting would be drafted after the meeting and sent to the participants for consideration and adoption.

Agenda item 9: Closure of the meeting

58. In her concluding remarks, the Coordinator highlighted the very important progress achieved. This was possible thanks to the engaged and constructive participation of Contracting Parties and the professional support of all MAP components working together towards the same goal.

59. Following the usual exchange of courtesies, the Chairperson closed the meeting on Friday 3 June 2011 at 6.00 pm.

CONCLUSIONS AND RECOMMENDATIONS

Third Meeting of Government-designated Experts on the Application of the Ecosystem Approach by MAP, held in Durres, Albania on 2-3 June 2011, welcoming the progress achieved since the second meeting of the group in 2008 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 elements (EO, OO and indicators) in the MAP/Barcelona Convention PoWs and action plans, including the ICZM and Marine litter and more generally to consider systematically these elements when coordinating work of the various MAP components or evaluating efficiency of MAP actions*
 - b) *prepare explanations on the rationale and methodology of the determination and implementation of ecosystem approach indicators, and draft a glossary of terms used for ecological, operational objectives and indicators*
 - c) *ensure coordination between the ecosystem approach implementation and the implementation of the EU MSFD (2008/56/CE), including the determination of GES and targets*
 - d) *ensure coherence of the 2012-2013 PW with the ecosystem approach and focus this PW on new related activities to be implemented*
 - e) *make cross reference in the 2012-2013 PW and budget in order to show the feasibility of the implementation of ecosystem approach.*

- f) *Provide ToRs for the pilot testing of objectives and indicators and include testing activities in the relevant 2012-2013 RAC PoWs.*

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) *include evidence of ECAP implementation roadmap through biennium MAP and RAC PoWs,*
- 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, through the activities included in the MAP and RAC PoWs. 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 clearly define operational implementation of ecosystem approach in the biennium 2012-2013, with specification of the relevant activities and their financial support*
- *To clarify that any endorsement of the timeline and proposed projected outputs beyond 2014 is for indicative purposes;*
- *To mandates the Secretariat to make operational the work on socio economic analysis for the biennium 2012-2013*
- *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 to support financially the implementation of the ecosystem approach*

ANNEX I - LIST OF PARTICIPANTS

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ANNEX II - AGENDA

DAY 1: THURSDAY, 2 JUNE 2011

- | | | |
|---------------|----|---|
| 08:30 - 09:00 | | Registration of the participants |
| 09:00 – 09:30 | 1. | Opening of the Meeting |
| | 2. | Election of officers and adoption of the agenda |
| 09:30 - 10:30 | 3. | Progress in implementing the Ecosystem Approach roadmap |
| 11:00 - 13:00 | 4. | The Initial Integrated Assessment of the Mediterranean Sea as reviewed GESAMP |
| 15:00 - 16:00 | | |
| 16:30 – 18.00 | 5. | Proposed Mediterranean ecological objectives associated with its operational objectives and indicators |

DAY 2: FRIDAY, 3 JUNE 2011

- | | | |
|---------------|----|--|
| 9:00 – 11:00 | 5. | (continued) |
| 11:00- 13:00 | 6. | Proposed timeline for implementing UNEP/MAP ecosystem approach roadmap in synergy with MSFD |
| 15:00 – 16:00 | 7. | Draft decision on the further application of the ecosystem approach in the Mediterranean |
| 16:30 – 18:00 | 8. | Adoption of recommendations and conclusions |
| 18:00 | 9. | Closure of the meeting |

Note:

Coffee breaks: 10.30-11.00 and 16.00-16.30 hrs

Lunch breaks: 13.00-15.00

APPENDIX I

PROPOSED ECOLOGICAL OBJECTIVES

1 Biodiversity

Ecological Objective	Operational Objectives	Indicators
Biological diversity is maintained or enhanced. The quality and occurrence of coastal¹ and marine habitats² and the distribution and abundance of coastal³ and marine species⁴ 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)
	1.3 Key coastal and marine habitats are not being lost	1.3.1 Potential / observed distributional range of certain coastal and marine habitats listed under SPA protocol
		1.3.2 Distributional pattern of certain coastal and marine habitats listed under SPA protocol
1.3.3 Condition of the habitat-defining species and communities		

¹ 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

² 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.

³ 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

⁴ On the basis of Annex II and III of the SPA and Biodiversity Protocol of the Barcelona Convention

2 Non-indigenous species

Ecological Objective	Operational Objectives	Indicators
Non-indigenous⁵ species⁶ 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

⁵ 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

⁶ 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

3 Harvest of commercially exploited fish and shellfish

Ecological Objective	Operational Objectives	Indicators
<p>Populations of selected commercially exploited fish and shellfish⁷ are within biologically safe limits, exhibiting a population age and size distribution that is indicative of a healthy stock</p>	<p>3.1 Level of exploitation by commercial fisheries is within biologically safe limits</p>	3.1.1 Total catch by operational unit ⁸
		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
	<p>3.2 The reproductive capacity of stocks is maintained</p>	3.2.1 Age structure determination (where feasible)
	3.2.2 Spawning Stock Biomass (SSB)	

⁷ 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

⁸ 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

Ecological Objective	Operational Objectives	Indicators
<p>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</p>	<p>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</p>	<p>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</p>
	<p>4.2 Normal proportion and abundances of selected species at all trophic levels of the food web are maintained</p>	<p>4.2.1 Proportion of top predators by weight in the food webs</p>
		<p>4.2.2 Trends in proportion or abundance of habitat-defining groups</p>
<p>4.2.3 Trends in proportion or abundance of taxa with fast turnover rates</p>		

5 Eutrophication

Ecological Objective	Operational Objectives	Indicators
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
		5.1.2 Nutrient ratios (silica, nitrogen and phosphorus), where appropriate
	5.2 Direct effects of nutrient over-enrichment are prevented	5.2.1 Chlorophyll-a concentration in the water column
		5.2.2 Water transparency where relevant
		5.2.3 Number and location of major events of nuisance/toxic algal blooms caused by human activities ⁹
	5.3 Indirect effects of nutrient over- enrichment are prevented	5.3.1 Dissolved oxygen near the bottom, i.e. changes due to increased organic matter decomposition, and size of the area concerned ^{*10}

6 Sea-floor integrity

Ecological Objective	Operational Objectives	Indicators
Sea-floor integrity is maintained, especially in priority benthic habitats ¹¹	6.1 Extent of physical alteration to the substrate is minimized	6.1.1 Distribution of bottom impacting activities ¹²
		6.1.2 Area of the substrate affected by physical alteration due to the different activities ¹⁴
	6.2 Impact of benthic disturbance in priority benthic habitats is minimized	6.2.1 Impact of bottom impacting activities ¹⁴ in priority benthic habitats
		6.2.2 Change in distribution and abundance of indicator species in priority habitats ¹³

⁹The 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.

¹⁰Monitoring to be carried out where appropriate

¹¹ e.g. coastal lagoons and marshes, intertidal areas, seagrass meadows, coralligenous communities, sea mounts, submarine canyons and slopes, deep-water coral and hydrothermal vents

¹² e.g bottom fishing, dredging activities, sediment disposal, seabed mining, drilling, marine installations, dumping and anchoring, land reclamation, sand and gravel extraction

¹³Indicator 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 Hydrography

Ecological Objective	Operational Objectives	Indicators
<p>Alteration of hydrographic conditions does not adversely affect coastal and marine ecosystems.</p>	<p>7.1 Impacts to the marine and coastal ecosystem induced by climate variability and/or climate change are minimized</p>	<p>7.1.1 Large scale changes in circulation patterns, temperature, pH, and salinity distribution</p>
		<p>7.1.2 Long term changes in sea level</p>
	<p>7.2 Alterations due to permanent constructions on the coast and watersheds, marine installations and seafloor anchored structures are minimized</p>	<p>7.2.1. Impact on the circulation caused by the presence of structures</p>
		<p>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</p>
		<p>7.2.3 Trends in sediment delivery, especially in major deltaic systems</p>
		<p>7.2.4 Extent of area affected by coastal erosion due to sediment supply alterations</p>
	<p>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</p>	<p>7.3.1. Trends in fresh water/sea water volume delivered to salt marshes, lagoons, estuaries, and deltas; desalination brines in the coastal zone</p>
		<p>7.3.2. Location and extent of the habitats impacted by changes in the circulation and the salinity induced by the alterations</p>
		<p>7.3.3 Changes in key species distribution due to the effects of seawater intake and outlet</p>

8 Coastal ecosystems and landscapes

Ecological Objective	Operational Objectives	Indicators
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 ¹⁴
		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 ¹⁵
		8.2.2 Change of landscape types
		8.2.3 Share of non-fragmented coastal habitats

¹⁴ Physical disturbance includes beach cleaning by mechanical means, sand mining, beach sand nourishment

¹⁵ Land-use classes according to the classification by Eurostat-OCDE, 1998:
<http://unstats.un.org/unsd/environment/q2004land.pdf>

9 Pollution

Ecological Objective	Operational Objectives	Indicators
Contaminants cause no significant impact on coastal and marine ecosystems and human health	9.1 Concentration of priority¹⁶ 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 ¹⁷
		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		

¹⁶ Priority contaminants as listed under the Barcelona Convention and LBS Protocol

¹⁷ Traceability of the origin of seafood sampled should be ensured

10 Marine litter

Ecological Objective	Operational Objectives	Indicators
Marine and coastal litter do not adversely affect coastal and marine environment¹⁸	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
		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 ¹⁹

11 Energy including underwater noise

Ecological Objective	Operational Objectives	Indicators
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

¹⁸ 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.

¹⁹ Marine mammals, marine birds and turtles included in the regional action plans of the SPA/BD Protocol.

APPENDIX II

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.