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Twelfth Meeting of Focal Points for Specially Protected Areas

Athens, Greece, 25-29 May 2015

Agenda item 15: Adoption of the meeting report

Report of the Twelfth Meeting of Focal Points for Specially Protected Areas

UNEP/MAP
RAC/SPA - Tunis, 2015

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Regional Activity Centre for Specially Protected Areas (RAC/SPA)
Boulevard du Leader Yasser Arafat
B.P. 337 - 1080 Tunis Cedex - Tunisia
E-mail: car-asp@rac-spa.org

Annexes:

Annex I List of participants

Annex II Agenda of the meeting

Annex III Recommendations of the 5th Mediterranean Conference on Marine Turtles

Annex IV Draft Updated Action Plan for the Conservation of Cetaceans in the Mediterranean Sea

Annex V Recommendations of the 2nd Symposium on the Conservation of Marine and Coastal Birds

Annex VI Recommendations of the 5th Mediterranean Symposium on Marine Vegetation

Annex VII Recommendations of the 2nd Mediterranean Symposium on Coralligenous and other Calcareous Bio-concretions in the Mediterranean Sea

Annex VIII Draft Updated Action Plan for the Conservation of the Coralligenous and other Calcareous Bio-concretions in the Mediterranean Sea

Annex IX Recommendations of the 1st Mediterranean Symposium on the Conservation of Dark Habitats

Annex X Draft Programme of Work for Reference Lists of Habitat types in the Mediterranean

Annex XI Draft Updated Action Plan concerning Species Introductions and Invasive Species in the Mediterranean Sea

Annex XII Preliminary list of projects proposed by the Secretariat for addressing SAP BIO funding needs

Annex XIII Executive Summary of the Karaburun Sazan Marine Park proposed for inclusion in the List of Specially Protected Areas of Mediterranean Importance (SPAMI List)

Annex XIV Recommendations by the 12th Meeting of the Focal Points for SPAs concerning the future development of the activities on MAPs in ABNJ and the expected new project on this issue

Report of the Twelfth Meeting of Focal Points for Specially Protected Areas (Athens, 25-29 May 2015)

Introduction

1. In accordance with the Decision of the Eighteenth Ordinary Meeting of the Contracting Parties to the Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols, related to the MAP Programme of Work and Budget for the 2014-2015 biennium (Decision IG.21/17), the Thematic Focal Points Meetings under MAP should be held in 2015.

2. The Meeting of the RAC/SPA Focal Points is one of these meetings; it was held in Athens from 25 to 29 May 2015, at the NOVOTEL Hotel (4 Michail Voda Str., 104 39 Athens, Greece).

Participation

3. All the Focal Points for SPAs had been invited to attend the meeting or to designate their representatives. The following Contracting Parties were represented at the meeting: Albania, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Monaco, Morocco, Montenegro, Slovenia, Spain, Tunisia and Turkey.

4. The following institutions and organizations were represented by observers: ACCOBAMS, GEF, IUCN-Med, CWS, Foundation Prince Albert II of Monaco, GIZ, Mohammed V University, Greenpeace International, MEDASSET, HCMR, MedPAN, Mohamed VI Foundation for Environmental Protection, OCEANA, WWF Greece and WWF-MedPO.

5. RAC/SPA acted as the Secretariat for the meeting.

6. The list of participants is attached as Annex I to the present report.

Agenda item 1 Opening of the meeting

7. The meeting was opened on Monday, 25 May 2015, at 9.30 a.m. by the representatives of the host country, the Coordinating Unit of the Mediterranean Action Plan (UNEP/MAP) and the Regional Activity Centre for Specially Protected Areas (UNEP/MAP-RAC/SPA).

8. Mr. Khalil ATTIA, Director of RAC/SPA, welcomed the participants and thanked the Greek authorities for hosting the meeting. He emphasized that RAC/SPA was celebrating in 2015 its 30th anniversary and that the first meeting of Focal Points of RAC/SPA had been held in Athens 25 years previously. Mediterranean biodiversity was facing major challenges and the coming years would be crucial at many levels. The impact of climate change on the region and its environment was steadily increasing and high priority should be given to the achievement of regional and global objectives, such as those linked to Aichi targets and the development of MPAs in the open sea, including deep seas. Close collaboration with partner organizations would help to achieve those objectives and to avoid overlapping and duplication. All these relevant issues would be tackled in the UNEP/MAP Mid-Term Strategy for the period 2016-2021.

9. Mr. Gaetano Leone, Coordinator of UNEP/MAP, said that biodiversity protection was one of the main mandates of the MAP system. RAC/SPA had developed its activities over the last decade in accordance with the general orientations of the Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean Region (SAP BIO). Participants in the meeting would be informed about the progress made to date towards the implementation of the Ecosystem Approach and about achievements to date under SAP BIO. They would also have the opportunity to discuss fund-raising options for the implementation National Action Plans and other SAP BIO activities during a roundtable to be attended by representatives of funding agencies, donors and partner organizations.

10. Mr. Yiannis Tsironis, Greek Alternate Minister for Reconstruction of Production, Environment and Energy, welcomed the participants. Highlighting the paramount importance of the conservation of biodiversity, he warned that increasing pressure from many sources on marine and coastal biodiversity was liable to hamper sustainable development. Such complex threats called for a response by the public and private sectors, the implementation of national and regional actions, and commitment on the part of all countries and stakeholders. The current period was crucial for many Mediterranean countries that were faced with a range of economic, social and political issues. Greece, which was gifted in terms of its marine and coastal biodiversity, believed that its future should be built on integrated management, conservation, and sustainable and equitable use of land, water and living resources. The Mediterranean Action Plan and the Barcelona Convention and its Protocols had a catalytic role to play in that regard.

11. The participants viewed a short film celebrating the 30th anniversary of RAC/SPA.

Agenda item 2 - Rules of procedure

12. The internal rules adopted for meetings and conferences of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Related Protocols (UNEP/IG.43/6, Annex XI) apply *mutatis mutandis* to the present meeting

Agenda item 3 Election of officers

13. On the recommendation of the Secretariat, the meeting unanimously elected the following officers:

Chairperson: Ms. Eleni TRYFON (Greece)

Vice-Chairpersons: Ms. Lara SAMAHA (Lebanon)

Ms. Saba GUELLOUZ (Tunisia)

Rapporteur: Mr. Leonardo TUNESI (Italy)

Agenda item 4 Adoption of the agenda and organization of work

14. The Secretariat introduced the provisional agenda distributed as document UNEP(DEPI)/MED WG.408/1 Rev.1 and the annotated version in document UNEP(DEPI)/MED WG.408/2 Rev.1.

15. After reviewing the two documents, the meeting approved the Agenda and the proposed timetable. The Agenda of the Meeting appears as Annex 1 to this report.

Agenda item 5 Status of implementation of the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean

16. The Secretariat introduced document UNEP(DEPI)/MED WG.408/3, Synthetic Note on the status of implementation of the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA/BD Protocol), which constitutes a brief synthesis of the information provided by the Contracting Parties about the implementation of the SPA/BD Protocol, in particular through the online reporting system of the Barcelona Convention and its Protocols. The synthesis covers mainly the reporting period from January 2012 to December 2013. However, with a view to providing an overview of progress made so far in implementing the SPA/BD Protocol, information from previous reporting periods was also considered. The Secretariat indicated that eleven Parties had submitted their reports (official submission or final draft) and that seven national reports were available as working drafts.

17. The Secretariat informed the meeting that the SPA/BD Protocol had entered into force on 19 December 1999, that 18 Contracting Parties to the Barcelona Convention were also Parties to the SPA/BD Protocol and that 4 were Parties to the SPA Protocol of 1982.

18. It was evident that, from the entry into force of the SPA/BD Protocol, most Mediterranean countries had strengthened their action in relation to the conservation of marine and coastal natural sites, the preservation of endangered or threatened species, and the tackling of threats to Mediterranean biodiversity.

19. With regard to the conservation of marine and coastal natural sites, the Secretariat indicated that:

(i) most of the Mediterranean countries had compiled lists of natural sites of conservation interest;

(ii) some Mediterranean countries had issued new regulations aimed at improving the process for protected area planning and management;

(iii) the Mediterranean MPAs still suffered from weaknesses in their management, particularly because of the lack of management plans and financial resources;

(iv) regional projects coordinated by RAC/SPA and its partner organizations were providing assistance in that context;

(v) the overall number of SPAMIs had increased, with inclusion of one SPA in the SPAMI list over the reporting period;

(vi) while significant emphasis had been placed on the establishment of MPAs in open sea areas in the Mediterranean, the Pelagos Sanctuary was still the only Mediterranean MPA that covered zones located in ABNJs;

(vii) consultation processes were under way among concerned countries to prepare for the establishment of open sea MPAs in the Alboran Sea, the Sicily Channel and the Adriatic Sea. The processes benefited from the work done in the Mediterranean for the identification of EBSAs (Ecologically or Biologically Significant Areas).

20. With regard to the preservation of endangered or threatened species, the Secretariat said that the information provided by the Parties in the online reporting system set for the Barcelona Convention and its Protocols, showed that most of the Mediterranean countries had: (i) established, or were establishing, national lists of endangered or threatened species; and (ii) enacted appropriate regulations protecting those species. The information about the actual enforcement of the regulations was, however, vague and could not be used to draw conclusions regarding their efficiency.

21. With regard to action plans for endangered species and habitats, the Secretariat indicated that :

i. For monk seals, a series of measures had been taken for the species, in particular: (i) granting of protection status for the species; (ii) establishment of MPAs covering important habitats; and

(iii) compilation of an inventory of breeding caves and other habitats of importance for the species. The Secretariat stated that Greece and Turkey, which were the countries with the largest monk seal populations in the Mediterranean, had developed national or local action plans for the species.

ii. For marine turtles, the measures taken related mainly to the protection and management of nesting beaches. The species remained poorly protected at sea since many turtle-critical habitats did not benefit from appropriate conservation measures, particularly feeding and breeding zones, migration routes, etc.

iii. For cetaceans, as most Mediterranean countries were Parties to the ACCOBAMS Agreement, common obligations under the Action Plan were fulfilled through the implementation of ACCOBAMS. The Secretariat noted that National Action Plans for the conservation of cetaceans had been developed in many countries and that the measures taken for cetacean conservation related mainly to the monitoring of strandings and to public awareness-raising.

iv. For cartilaginous fish species, the actions most commonly reported by countries involved the organization of awareness raising campaigns targeting fishermen and the development of information and awareness-raising material targeting recreational fishermen, divers and other groups of sea users.

v. For bird species, the reports of all Parties mentioned that bird species were protected by law and that protected areas had been established to conserve bird species populations and their habitats, particularly in the context of other conservation instruments, such as EU Directives and the AEWA Agreement.

vi. For the introduction of species and invasive species in the Mediterranean Sea, most of the Parties mentioned that they had enacted legislation to control the introduction of marine species or had incorporated the pertinent provisions of relevant international agreements in their domestic regulations. Most of the activities undertaken in the region concerning non-indigenous species were undertaken by regional organizations and by some scientists acting on their personal initiative.

22. The Secretariat stated that bilateral cooperation among Parties in relation to the implementation of the SPA/BD Protocol was very limited, particularly in the Southern Mediterranean region, and that the main limiting factors were the lack of financial resources and the lack of technical and scientific capacity.

Agenda item 6 **Species conservation**

6.1 Action Plan for the Management of the Monk Seal in the Mediterranean and Regional Strategy for the Conservation of the Mediterranean Monk Seal

23. Making reference to the relevant sections of document UNEP(DEPI)/MED WG.408/4 Rev.1, the Secretariat informed the meeting about progress made in the implementation of the Action Plan. The representative of Croatia suggested that one should not be too ambitious with respect to the recovery of monk seals in new areas, since Croatia has zero individual monk seals.

6.2 Action Plan for the Conservation of Mediterranean Marine Turtles

24. The Secretariat informed the meeting about progress made in the implementation of the Action Plan, making reference to the relevant sections of document UNEP(DEPI)/MED WG.408/4 Rev.1, and invited the meeting to take note, in particular, of the recommendations of the 5th Mediterranean Conference on Marine Turtles held in Dalaman (Turkey) from 19 to 23 April 2015 (Annex III to this report).

25. The representative of France informed the meeting about the detailed activities undertaken in her country for the implementation of the Action Plan. She added, in particular, that a natural outdoor rehabilitation centre had been developed and inaugurated at La Grande Motte in spring 2014 and that about 30 new observers from the Network of French Mediterranean Marine Turtles (RTMMF) had been trained to handle/examine stranded or accidentally captured marine turtles and to transport wounded marine turtles to the rescue centres.

26. The representative of Italy informed the meeting that his country had established a system, covering the entire national coast, for the conservation of marine turtles. In this context a Guideline had been issued for the recovery, rescue, foster care and management of sea turtles and for their rehabilitation and handling for scientific purposes. The documents available in Italian, could be disseminated for widespread use by scientists and other turtle specialists.

27. The representatives of Croatia, Slovenia and Tunisia provided further information regarding work undertaken for marine turtles in their countries.

28. The representative of Turkey highlighted the results of the 5th Mediterranean Conference on Marine Turtles, which had been organized back to back with the 35th Annual Symposium on Sea Turtle Biology and Conservation.

29. The representative of the Cyprus Wildlife Society (CWS) informed the meeting that CWS had organized training courses since 1989, in cooperation with RAC/SPA, on the conservation of marine turtles and that it had run them every year until 2010. Since then the practical, hands-on courses continued to be organized each year in cooperation with the Council of Europe (Bern Convention). He

expressed the willingness of CWS to continue cooperating with RAC/SPA on this and any other related issue.

30. The president of MEDASSET informed the meeting that the NGO had been working for thirty-six years on the conservation of marine turtles and expressed its willingness, as a partner to the Action Plan, to further collaborate with RAC/SPA, in particular by offering its expertise and scientific assistance for follow-up to the Action Plan implementation.

31. The Secretariat welcomed the collaboration and assistance offer by MEDASSET.

6.3 Action Plan for the Conservation of Cetaceans in the Mediterranean Sea

32. After briefing the meeting on activities related to cetaceans, the Secretariat introduced document UNEP(DEPI)/MED WG.408/8 containing elements for the amendment of the Action Plan and invited the meeting to review the proposed elements with a view to their submission to the Contracting Parties for adoption.

33. The representative of the Secretariat of ACCOBAMS congratulated RAC/SPA on the work it had carried out during the last two years for the conservation of cetaceans in accordance with its function as the ACCOBAMS Sub-Regional Coordination Unit, and for its contribution to the implementation of ACCOBAMS in the Mediterranean.

34. She said that the proposed elements for the amendment of the Action Plan were fully consistent with the provisions of ACCOBAMS and, in particular, with its Conservation Plan (Annex 2 to the Agreement) and the priorities adopted by the Contracting Parties to ACCOBAMS.

35. She informed the meeting about the main action undertaken within the framework of ACCOBAMS and proposed to RAC/SPA, in line with its function as the ACCOBAMS Sub-Regional Coordination Unit, the holding of a joint side event at the next meeting of the Contracting Parties to the Barcelona Convention with a view to highlighting the excellent coordination between the two organizations.

36. The representative of France provided detailed information on the activities undertaken in her country for the implementation of the Action Plan. She welcomed the work accomplished and the proposed action plan. She also mentioned the creation of the ACCOBAMS label “High Quality Whale Watching” developed initially in the Pelagos Sanctuary, which facilitated the mitigation of the negative impact of whale-watching. It should be also applied in the other Parties to ACCOBAMS.

37. The representative of IUCN-Med stressed that coordination and cooperation under the Action Plans concerning different species was essential among all partners and indicated that IUCN was

conducting Red List assessments (at the global, regional or national level) of the status of species (threatened, vulnerable, etc.) that could serve as the basis for discussions concerning the amendment of Annex II to the SPA/BD Protocol (List of endangered or threatened species).

38. The representative of Italy informed the meeting that his country was conducting Red List assessments on all marine vertebrates (except for Osteichtyes), and of corals, which were published by the national IUCN committee. Furthermore, the representative of Croatia presented the regional project NETCET, implemented in Croatia, Montenegro, Albania and Slovenia, which concerned the networking of protection of cetaceans and marine turtles.

39. The meeting proposed some amendments to the elements contained in document UNEP(DEPI)/MED WG.408/8 and invited RAC/SPA to submit the revised version (Annex IV to this report) for adoption by the Contracting Parties.

6.4 Action Plan for the Conservation of Bird Species listed in Annex II of the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean

40. The Secretariat informed the meeting about progress made in the implementation of the Action Plan, making reference to the relevant sections of document UNEP(DEPI)/MED WG.408/4 Rev.1, and highlighted the recommendations of the 2nd Symposium on the conservation of marine and coastal birds in the Mediterranean held in Hammamet (Tunisia) from 20 to 22 February 2015 (Annex V).

41. In response to a suggestion made by the representative of Israel, the Secretariat indicated that it would liaise with the Secretariat of the AEWA Agreement with a view to establishing collaboration bounds.

42. The representative of France provided detailed information regarding activities undertaken for the conservation of marine and coastal birds in her country. She emphasized in that context that several Natura 2000 sites had been designated on the Mediterranean coast of France, chiefly for the conservation of seabirds.

6.5 Action Plan for the Conservation of Cartilaginous Fish (Chondrichthyans) in the Mediterranean Sea

43. The Secretariat briefly presented the activities undertaken in connection with the implementation of this Action Plan, in particular desktop analysis concerning fishing activities in the Adriatic Sea and the Sicily Channel/Tunisian Plateau.

44. The representative of France stated that the Red Book of chondrichthyans on the French coasts had been published in January 2014 and that the SELPAL Programme had permitted the collection of data concerning the ecology of incidentally captured shark species and concerning seabirds and marine turtles. She added that a bibliographic synthesis of spatio-temporal management measures related to elasmobranchs was being finalized by the AAMP.

45. Several delegations provided information on the elaboration of lists of protected species of elasmobranchs in their respective countries.

46. The Secretariat informed the meeting that the funds allocated by the MTF in 2014-2015 for the regional Action Plans on threatened species (Mediterranean Monk Seal, Cetaceans, Marine Turtles, Cartilaginous Fish and Seabirds) were limited and insufficient to finance the implementation of all the planned activities adopted within their implementation calendars. However, the activities under other projects being developed by RAC/SPA (MedMPAnet and MedOpenSeas) permitted the compilation of updated information for some subregions regarding cetaceans, marine turtles, cartilaginous fish and seabirds.

Agenda item 7 Ecosystems conservation

47. The Secretariat presented, for each Action Plan included under this agenda item, a summary of the activities carried out, referring to the relevant sections of documents UNEP(DEPI)/MED WG.408/4 Rev.1 and UNEP(DEPI)/MED WG.408/Inf.6.

7.1 Action Plan for the Conservation of Marine Vegetation in the Mediterranean Sea

48. The Secretariat presented the activities carried out within the framework of the implementation of the Action Plan for the Conservation of Marine Vegetation in the Mediterranean Sea. It said that key habitats such as seagrass meadows were taken into account in ecological characterizations carried out under the MedMPAnet project and the new MedKeyHabitats project. It also reported that the RAC/SPA, in collaboration with the Institute of the Republic of Slovenia for Nature Conservation, had organized the 5th Mediterranean Symposium on Marine Vegetation. In that connection, it thanked the Slovenian authorities for their efforts to ensure the success of the event. Lastly, it informed the meeting that the 6th Mediterranean Symposium on Marine Vegetation could be organized jointly with the 5th Mediterranean

Seagrass Workshop in 2018. It then invited the meeting to take note of the recommendations of the 5th Mediterranean Symposium on Marine Vegetation (Annex VI to this report).

49. The representative of France informed the meeting about the activities undertaken in her country and mentioned that in 2010 France had launched a large marine biocenosis mapping programme (CARTHAM) at the national level and had supported several Posidonia monitoring networks, particularly in the context of the implementation of EU Directives (Habitats, Water and Marine Strategy).

50. The representative of Egypt requested the assistance of RAC/SPA in mapping the marine vegetation in his country.

51. Under this agenda item, the Secretariat also reviewed progress in activities under the Project "Mapping of Mediterranean Key Marine Habitats in the Mediterranean and Promoting their Conservation through the Establishment of Specially Protected Areas of Mediterranean Importance (SPAMI)" (MedKeyHabitats Project). It provided an overview of activities implemented since the project was launched in December 2013 as well as activities planned for the period 2015-2016.

52. The representative of Libya congratulated RAC/SPA on its excellent work under the MedKeyHabitats Project and commended the involvement of Libyan experts in the Project capacity-building programme.

53. The representative of Tunisia congratulated the Secretariat on its excellent work under the MedKeyHabitats Project, including the organization of training in the Kuriat Islands (Tunisia), which had also benefited managers of Marine Protected Areas. She also welcomed collaboration with the Project team in mapping key habitats and setting up monitoring networks in the Marine Protected Area of Cap Negro/Sidi Mechreg (Tunisia).

54. The representative of Montenegro commended the work accomplished and thanked RAC/SPA for the assistance provided to her country through the MedKeyHabitats Project, particularly in connection with the mapping of key marine habitats by side-scan sonar for two pilot sites in Montenegro. She underscored the importance of mapping and data acquisition, which were priority biodiversity conservation activities in Montenegro, adding that the consultative approach adopted under the Project and coordination with countries to meet those priorities constituted the best means of maximizing the impact of the activities.

7.2 Action Plan for the Conservation of the Coralligenous and Other Calcareous Bio-concretions in the Mediterranean Sea

55. The Secretariat presented the activities carried out within the framework of the implementation of the Action Plan for the Coralligenous and other Calcareous Bio-concretions in the Mediterranean. It added that such habitats were taken into account in the ecological characterizations conducted as part of the MedMPAnet Project and the new MedKeyHabitats Project. It also reported that the RAC/SPA, in collaboration with the Institute of the Republic of Slovenia for Nature Conservation, had organized the 2nd Mediterranean Symposium on Coralligenous and other Calcareous Bio-concretions. It thanked the Slovenian authorities for their efforts to ensure the success of the event. Lastly, the Secretariat informed the meeting that the 3rd Symposium could be organized in conjunction with the 2nd Symposium on Dark Habitats in Croatia in 2018. It then invited the meeting to take note of the recommendations of the 2nd Mediterranean Symposium on Coralligenous and other Calcareous Bio-concretions (Annex VII to this report).

56. The Secretariat presented the Draft Updated Action Plan for the Conservation of the Coralligenous and other Calcareous Bio-concretions in the Mediterranean Sea submitted in document UNEP(DEPI)/MED WG.408/9 and explained that, acting on the Contracting Parties' mandate, RAC/SPA had taken into account the ongoing EcAp process and its Draft Monitoring and Assessment Programme in launching the updating of the Action Plan.

57. The representative of IUCN-Med again stressed the need for cooperation and coordination on topics such as coralligenous species and habitats, since other partners were involved in different activities, in particular the IUCN Red List for Anthozoans in the Mediterranean involving 25 regional experts, which had been conducted in 2014. Further stages developed by RAC/SPA could benefit from that work and activate and develop the existing network of experts. In addition, it was important to note that the European Commission was currently developing a project to revise the EUNIS system on marine habitats, taking into account biogeographic areas (one being the Mediterranean). The representative of Italy stressed the importance of ensuring that RAC/SPA took steps to update the current list of Mediterranean benthic habitats, since the new list would be used by the new EUNIS system.

58. The representative of Spain informed the meeting that a draft scientific proposal to include 10 Anthozoan species in Annex II to the SPA/BD had been developed. The proposal was expected to be ready for the next SPA Focal Point meeting.

59. The representative of Slovenia informed the meeting about the TRECORALA project, "TREzze e CORalligeno dell'ALto Adriatico" and suggested that the results of the project should be taken on board.

60. The representative of France informed the meeting about the national project for the cartography of marine biocenoses (CARTHAM), which had permitted the surface area to be covered by coralligenous assemblages. She also stated that France was monitoring coralligenous assemblages under the Water Framework Directive and that the programme was called RECOR. An indicator (known as the COR index) had been elaborated. France was currently engaged in continuous mapping of marine habitats on its Mediterranean coast.

61. The representative of OCEANA supported the proposal made by the other representatives and stressed that numerous species listed in Annex II to the SPA/BD Protocol still lacked protective status at the national level. The available data confirmed their vulnerability and fragility.

62. The Secretariat welcomed the IUCN-Med offer and drew attention to the procedure for amending Annexes II and III, stressing that the Secretariat was not authorized, without an explicit mandate, to submit proposals for amendments to the next meetings of SPA Focal Points.

63. The meeting took note of the recommendations of the 2nd Mediterranean Symposium on Coralligenous and other Calcareous Bio-concretions (Annex VII to this report) and invited RAC/SPA to submit the Draft Updated Action Plan for the Conservation of the Coralligenous and other Calcareous Bio-concretions in the Mediterranean Sea (Annex VIII to this report) for adoption by the Contracting Parties.

7.3 Action Plan for the Conservation of Habitats and Species Associated with Seamounts, Underwater Caves and Canyons, Aphotic Hard Beds and Chemo-synthetic Phenomena in the Mediterranean Sea (Dark Habitats Action Plan)

64. The Secretariat presented the activities carried out within the framework of the implementation of the Dark Habitats Action Plan. It emphasized that such habitats were covered by the new MedKeyHabitats Project. It added that the RAC/SPA, in collaboration with the Slovenian Institute for Nature Conservation, had organized the 1st Mediterranean Symposium on the Conservation of Dark Habitats. Furthermore, it informed the meeting that the second symposium could be organized jointly with the 3rd Mediterranean Symposium on Coralligenous and other Bio-concretions in Croatia in 2018. The Secretariat invited the participants to take note of the recommendations of the 1st Mediterranean Symposium on the Conservation of Dark Habitats and to consider the application it had received from Oceana for the status of Action Plan Partner.

65. The representative of France presented the relevant activities undertaken in her country, in particular oceanographic canyon head exploration campaigns carried out between 2008 and 2010: MedSeaCan/CorSeaCan. The network of Natura 2000 sites should eventually be extended in the light of the results of the campaigns. Several seamounts had been identified in the PACA region and Corsica.

Furthermore, underwater caves had been identified in Corsica in the context of a study funded by DREAL and under the CARTHAM project.

66. The representative of Italy informed the meeting that his country had launched a programme to protect deep hard-bottom habitats beyond the 12 nautical miles of the eastern basin, where Italy had established an ecological protection zone covering both the Tyrrhenian Sea and the Ligurian Sea. As part of that initiative, 24 sites covering approximately 4,000 km^2 had been identified and could be protected within the next two years.

67. The meeting took note of the recommendations of the 1st Mediterranean Symposium on the Conservation of Dark Habitats (Annex IX) and approved the Secretariat's proposal to accept the application of Oceana to become an Action Plan Partner.

7.4 Activities for the elaboration of national inventories of natural sites of conservation interest

68. The Secretariat reviewed the activities undertaken to develop national inventories of natural sites of conservation interest, namely the elaboration of the reference list of marine habitat types for the selection of sites to be included in national inventories of natural sites of conservation interest, and of the related Standard Data Form (SDF) and Interpretation Manual. Those tools would be used in the "Project on Mapping of Key Marine Habitats of the Mediterranean and Promoting their Conservation through the Establishment of Specially Protected Areas of Mediterranean Importance (SPAMIs)" (MedKeyHabitats Project).

69. The Secretariat introduced document UNEP (DEPI)/MED WG.408/10 Rev.1, which proposed a Draft Programme of Work for reference lists of habitat types in the Mediterranean.

70. The delegate of Italy supported the Draft Programme of Work, stressing its importance for the updating of the Mediterranean list of habitats and for the European information system on nature (EUNIS).

71. The meeting approved the Draft Programme of Work for reference lists of habitat types in the Mediterranean (Annex X to this report) and invited RAC/SPA to submit it for adoption by the Contracting Parties.

7.5 Action Plan concerning Species Introductions and Invasive Species in the Mediterranean Sea

72. The Secretariat presented the activities carried out within the implementation framework of the Action Plan, in particular the updating of the MAMIAS database to make it more operational and

ergonomic but also to support the EcAp Integrated Monitoring and Assessment Programme under EO 2 (non-indigenous species).

73. The Secretariat then presented the proposed amendments to the Action Plan concerning Species Introductions and Invasive Species in the Mediterranean Sea, specifying that the amendments were required to ensure the updating of the implementation calendar and its harmonization with the EcAp process.

74. The representative of IUCN-Med presented the activities conducted with respect to invasive species (the most threatening ones) in the Mediterranean, more specifically in and around MPAs, with a view to providing information and warnings to MPAs (managers, researchers and technicians) and developing a strategy for Mediterranean MPAs. The MedMIS platform functioned at different levels, permitting the individual recording of sightings and interconnection with other existing local and regional platforms. An advisory group of scientists had worked and would continue to work closely with IUCN to define a blacklist of important invasive species to be taken into account in the monitoring of MPAs. The list would be regularly updated. Data would be included, following verification, in a public database. Other activities on invasive species, undertaken in collaboration with other organizations, dealt with research on the ecological and socio-economic impact of their presence and development in the region. Cooperation on all these topics with all partners was strongly recommended and IUCN-Med was willing to engage in joint actions.

75. The representative of France welcomed the proposed amendments to the Action Plan, which were in line with the recommendations made at the national level. She referred to the activities undertaken in her country as part of the Strategic Framework Directive for the marine environment. She stated in that connection that the Marine Mammal Action Plan (MMAP) and the implementation of the EU Regulation concerning Invasive Alien Species (IAS) constituted the French contribution to the regional Action Plan. She stressed the importance of coordination regarding such issues with other regional secretariats, such as the HELCOM and OSPAR conventions, as well as with the CORMON group on integrated monitoring and, in particular, with the Biodiversity Working Group (EcAp). She said that France supported the MedMIS platform, which should be deployed to harmonize data at the Mediterranean level.

76. The Secretariat thanked IUCN-Med for its offer of collaboration and noted that, given the various existing areas of collaboration between RAC/SPA and IUCN-Med, it would be very easy to enhance such collaboration and to use the available tools, particularly for MPAs.

77. It also indicated that the Secretariat had taken note of the activities carried out in the different countries as well as the recommendation by France to forge links with other relevant conventions and with the CORMON work under the EcAp.

78. With regard to terminology, the Secretariat took note of the different opinions and said that the issue would be taken into account in future work on the subject, including work by the EcAp monitoring groups.

79. The meeting approved the Draft Updated Action Plan concerning Species Introductions and Invasive Species in the Mediterranean Sea with some modifications. However, the representative of Cyprus expressed a reservation concerning the use of the term non-indigenous species. The Updated Action Plan, as approved by the meeting, appears as Annex XI to this report.

Agenda item 8 **Implementation of the Ecosystem Approach to the management of human activities that may affect the Mediterranean marine and coastal environment in the framework of the Mediterranean Action Plan (MAP)/Barcelona Convention (EcAp)**

8.1 Achievement of Good Environmental Status (GES)

80. The representative of the UNEP/MAP Secretariat presented the state of play of the EcAp process, highlighting the overall aim of the process, namely to achieve Good Environmental Status (GES) for the Mediterranean Sea and its coast.

81. She provided information on the key achievements of the EcAp process to date and on the two key streams on which work was currently focusing, i.e. on the development of an Integrated Monitoring and Assessment Programme (UNEP(DEPI)/MED WG.408/6) and on the development of a Gap Analysis of existing measures under the Barcelona Convention that were of relevance to the achievement or maintenance of good environmental status of the Mediterranean Sea, in line with the Ecosystem Approach (UNEP(DEPI)/MED 408/5).

82. With regard to the draft Gap Analysis (UNEP(DEPI)/MED WG.408/5), she highlighted the key initial findings, such as the need for further strengthening of the implementation of existing measures pertaining to biodiversity and non-indigenous species (NIS).

83. The Focal Points for SPAs agreed to send written comments on the draft Gap Analysis within the next three weeks (by 20 June 2015).

8.2 Draft Integrated Monitoring and Assessment Programme

84. With regard to the main elements of the draft Integrated Monitoring and Assessment Programme, she presented the process leading to proposed Annex IV to document UNEP(DEPI)/MED WG.408/6, which contained the proposed Minimum List of habitats and species, and invited the participants to review the proposed list with a view to its adoption.

85. RAC/SPA informed the meeting about its contribution to the Ecosystem Approach (EcAp) process through participation in monitoring cluster meetings, GES and targets meetings, and integrated consultation meetings, and providing technical input to the process as well to other meetings of relevance to the Marine Strategy Framework Directive (MSFD) organized at the European level.

86. RAC/SPA had facilitated the launching of a regional monitoring system by preparing a guidance document on monitoring for Ecological Objective (EO) 1, and had contributed to the survey to assess marine environment monitoring activities in Mediterranean countries in the biodiversity area.

87. With regard to issues related to fisheries, the Secretariat emphasized that RAC/SPA was working in close collaboration with GFCM. The collaboration would be reinforced through the establishment of a joint strategy not only with GFCM but also with the secretariats of ACCOBAMS, IUCN-Med and MedPAN in order to promote joint efforts for the conservation of Mediterranean biodiversity and resources.

88. The representative of the ACCOBAMS Secretariat thanked RAC/SPA and the UNEP/MAP Secretariat in general for the collaboration that had been established for the preparation of the Draft Integrated Monitoring and Assessment Programme and, in particular, for the preparation of elements pertaining to the monitoring of cetaceans for Ecological Objective 1 “Biodiversity”, and the preparation of the strategy for monitoring underwater noise for the whole of the Mediterranean basin in the framework of Ecological Objective 11 “Energy, including underwater noise”.

89. She also introduced the “ACCOBAMS Survey Initiative” (UNEP(DEPI)/MED WG.408/Inf.4) aimed at establishing an integrated and coordinated monitoring programme for cetaceans at the regional level. She highlighted that the results of the initiative were expected to provide useful information about the cetacean populations in the Mediterranean and a significant contribution to the EcAp process.

90. Introducing document UNEP(DEPI)/MED WG.408/Inf.27, the representative of the ACCOBAMS Secretariat stated that the document had been prepared at the RAC/SPA level by the Chair of the ACCOBAMS Scientific Committee. As the document would be submitted for adoption by the next Meeting of Parties to ACCOBAMS, she stressed that it would be essential for the final version of

the document to take into account the comments made at the meetings of the two organizations – in order to ensure that there would be just one document.

91. MEDASSET welcomed the work undertaken by the UNEP/MAP Secretariat and RAC/SPA in relation to document UNEP(DEPI)/MED WG.408/6. In line with the recommendation of the Integrated CORMON Meeting (30 March - 1 April 2015), and in collaboration with RAC/SPA, MEDASSET had reviewed the document with respect to sea turtle monitoring in relation to common indicators 3-5 included in Ecological Objective 1 - Biodiversity. In addition, MEDASSET had assisted RAC/SPA in integrating the comments of the Mediterranean members of the IUCN Marine Turtle Specialist Group (MTSG) into the document.

92. MEDASSET suggested that a RAC/SPA sea turtle monitoring guide/manual would be a more appropriate means of presenting detailed information to the Contracting Parties, managers and researchers who would implement the monitoring programme. MEDASSET, by presenting the review, confirmed its willingness to collaborate with the UNEP/MAP system for the implementation of the Ecosystem Approach in the Mediterranean.

93. The Focal Points for SPAs welcomed the draft Minimum List of habitats and species and agreed that written comments or suggestions for modification could be sent to the Secretariat by 20 June 2015 at the latest. France entered a scrutiny reservation due to the late submission of documents.

Agenda item 9 **The Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean Region (SAP BIO) Strategic Goals and Priority Actions**

94. The Secretariat presented general background information on the history of SAP BIO, including past efforts to achieve funding for key priority issues. Three projects had provided sound funding for SAP BIO activities until the current year (MedMPAnet, MedOpenSeas and MedKeyHabitats). The Secretariat also provided information on the assessment of SAP BIO implementation that had taken place in 2013. Based on that assessment, the Contracting Parties had agreed on a set of strategic goals and priority actions for the period 2014-2020 and had requested the Secretariat to investigate options for ensuring appropriate financial support for the implementation of SAP BIO at the national and regional levels (see Decision IG.20/4).

95. The Secretariat informed the meeting about the implementation of Decision IG.20/4, which provided for the preparation of project portfolios addressing the updated SAP BIO Priority Actions, including (i) national pilot projects targeting national priorities in the framework of SAP BIO and (ii) regional projects to support countries in areas of regional interest, and the establishment of contacts with donor institutions.

96. It further presented a portfolio of 11 project concepts related to the Strategic Goals and Priority Actions of SAP BIO, and the participants were invited to express their views and provide contributions regarding the proposals.

97. The representative of Greece provided a detailed description of a project on Marine Spatial Planning designed to facilitate implementation of the provisions of the ICZM Protocol concerning MSP and emphasized that the project promoters were open to inputs and synergies from countries, RACs and NGOs.

98. Several Focal Points expressed support for the activities being undertaken by RAC/SPA regarding SAP BIO, noting that it was fulfilling the needs expressed by countries at the previous Focal Point meeting. In this regard, the representative of Lebanon expressed her country's interest in being part of projects 2, 3, 6, 7, 8, 9 and 11 listed in Annex XII.

99. The representative of Italy stressed the importance of providing a general introduction to the project proposals that clearly explain the rationale underlying them in light of the Aichi targets, the EcAp process and the Mid-Term Strategy. He also stressed the importance of involving countries through the Focal Points when the proposal directly concerned them.

100. The representative of Greece suggested linking the project just presented with the RAC/SPA project concept on connectivity and MSP.

101. The representative of Egypt expressed his interest in obtaining support for the development of a National Action Plan for Marine Turtles, and MEDASSET mentioned that it would be willing to provide technical support for the Plan. The Secretariat took note of both interventions.

102. The representative of Montenegro suggested extending the portfolio of projects to encompass a wider range of sensitive species and habitats linked to future monitoring within the EcAp and creating a project that would focus on the revision and updating of SAP BIO National Action Plans to take account of monitoring actions needed for the Ecosystem Approach.

103. The representative of Slovenia acknowledged the existence of projects supporting Action Plans implementation and suggested including a project to support the Action Plan on Coralligenous and other Calcareous Bio-concretions. Furthermore, current projects such as AdriaPlan and MedTrends could support future MSP activities.

104. The representative of Croatia suggested that one should not be too ambitious with respect to the recovery of monk seals in new areas in the short term, since the only known female in her country had recently died; while the representatives of Greece and Cyprus expressed their countries' interest in

enlarging the project on conservation of the Mediterranean monk seal to include the Eastern Mediterranean monk seal populations.

105. The Deputy Coordinator of UNEP/MAP, noting the interest expressed by the Focal Points in the proposed project concepts, thanked the Focal Points for their contributions and the RAC/SPA for the work being undertaken.

106. After further exchanges of views with the Parties on the projects, RAC/SPA informed the meeting that it had taken note of their opinions and suggestions. The preliminary list of projects proposed by the Secretariat for addressing SAP BIO funding needs, taking into account the proposals by participants, appears in Annex XII to this report.

Agenda item 10 Marine and Coastal Protected Areas, including in the open seas and deep seas

10.1 List of Specially Protected Areas of Mediterranean Importance (SPAMI List)

10.1.1 Ordinary Periodic Revision of the SPAMI List

107. The Secretariat provided the meeting with a brief reminder of the Procedure for the revision of the areas included in the SPAMI List, as adopted by the Contracting Parties in 2008, and introduced the Ordinary Periodic Review of SPAMIs undertaken during the current biennium, the results of which were presented in document UNEP(DEPI)/MED WG.408/12.

108. The 2014-2015 periodic reviews concerned the following 22 SPAMIs:

- Bouches de Bonifacio Nature Reserve (France);
- Port-Cros National Park (France);
- Pelagos Sanctuary for the Conservation of Marine Mammals (France, Italy, Monaco);
- Marine Protected Area and Nature Reserve of Torre Guaceto (Italy);
- Marine Protected Area of Capo Caccia-Isola Piana (Italy);
- Marine Protected Area of Tavolara-Punta Coda Cavallo (Italy);
- Miramare Marine Protected Area (Italy);
- Plemmirio Marine Protected Area (Italy);
- Punta Campanella Marine Protected Area (Italy);
- Al-Hoceima National Park (Morocco);
- Alboran Island (Spain);
- Archipelago of Cabrera National Park (Spain);
- Cabo de Gata-Nijar Natural Park (Spain);
- Cap de Creus Natural Park (Spain);

- Columbretes Islands (Spain);
- Mar Menor and Oriental Mediterranean zone of the Region of Murcia coast (Spain);
- Maro-Cerro Gordo Cliffs (Spain);
- Medes Islands (Spain);
- Sea Bottom of the Levante of Almeria (Spain);
- Kneiss Islands (Tunisia);
- La Galite Archipelago (Tunisia); and
- Zembra and Zembretta National Park (Tunisia).

109. The Secretariat also highlighted the most recurrent recommendations addressed to RAC/SPA within the periodic evaluation reports, which consisted in: (i) further promoting networking among SPAMIs, and (ii) revising the Review Format based on the experience gained from the SPAMI evaluations undertaken so far.

110. Given the urgency of the latter recommendation, the meeting agreed to elaborate a new Ordinary Review Format with a view to submitting it for adoption by the next meeting of the Contracting Parties (COP 19). In this context, RAC/SPA shall prepare a first draft and take advantage of the forthcoming SPAMI Conference (9-12 June 2015) in order to consult with the attending Focal Points, before circulating the draft Ordinary Review Format for further comments and finalization in time for submission to the forthcoming meeting of MAP Focal Points (mid-October 2015).

111. The Chairwomen of MedPAN expressed the willingness of her organization to support the improvement of networking among SPAMIs.

112. The meeting approved the results of the ordinary review of the twenty-two SPAMIs and recommended that RAC/SPA proceed, during the next biennium, with a follow-up and monitoring of the implementation of the recommendations addressed to the SPAMI managing authorities as part of the ordinary review reports.

113. The Secretariat informed the meeting that the 2017 ordinary review round would concern the SPAMIs included in the SPAMI List in 2005.

10.1.2 Inclusion of areas in the SPAMI List

114. The Secretariat outlined the SPAMI objectives and the procedure for inclusion in the SPAMI List and informed the meeting that it had received only one new request for inclusion in the SPAMI List, from Albania concerning Karaburun Sazan Marine Park. The proposal had been elaborated with the support of the MedKeyHabitats Project.

115. In accordance with the procedures laid down in the SPA/BD Protocol, the Albanian draft proposal had been transmitted for examination to the Focal Points for the SPAs (UNEP(DEPI)/MED WG.408/13).

116. The Albanian representative presented the Karaburun Sazan Marine Park by providing a general description of the area, presenting an overview of the habitats and the species of interest and describing the management plan of the protected area. She indicated that a management committee had been set up to coordinate management activities.

117. The meeting agreed to submit the Albanian proposal to the Parties to the Barcelona Convention for inclusion in the SPAMI List. The executive summary of the Presentation Report appears as Annex XIII to this report.

10.2 Regional Working Programme for the Coastal and Marine Protected Areas in the Mediterranean Sea, including the High Sea

10.2.1 Activities for the identification and creation of SPAMIs in the open seas, including the deep seas

118. The Secretariat presented the results achieved to date through the project aimed at supporting the identification and creation of SPAMIs in areas embracing the open seas, including the deep seas, which had been implemented in three consecutive phases and would end in September 2015.

119. It provided a general description of the project, with an overview of outputs achieved since its launching. RAC/SPA had been compiling data and publishing thematic biodiversity reports and related legal documents on open sea areas since 2008. A Geographic Information System was being developed since 2010.

120. The continuation at regional level of surveying efforts for areas of value for the creation of SPAMIs in the open seas provided significant visibility to key regional inputs to the international negotiations on Ecologically or Biologically Significant Marine Areas (EBSAs). Reference was made to the related adoption of Mediterranean EBSAs at the 12th Conference of the Parties (COP 12) to the Convention on Biological Diversity (CBD) in Pyeongchang, Republic of Korea (October 2014).

121. A draft EBSA description had already been presented to the Extraordinary Meeting of SPA Focal Points in 2010 and an agreement had been reached on 12 priority conservation areas within those potential EBSAs. COP 10 of the Convention on Biological Diversity had initiated a workshop process to describe EBSAs in different regions of the world's oceans in October 2011. RAC/SPA and others had compiled additional data for the Mediterranean from 2011 to 2014. A review of Draft Mediterranean EBSAs had been undertaken during a joint UNEP/MAP-CBD workshop, with IUCN-Med collaboration, in April 2014 in Malaga, Spain, where 17 EBSAs had been defined. CBD COP 12 had agreed to include 15 of the Mediterranean EBSAs in the EBSA repository in October 2014. This formal international recognition of the ecological and biological importance of the Mediterranean areas concerned sent strong signals to decision-makers concerning their priority value for marine spatial management and supported work under the Barcelona Convention on marine conservation.

122. A clear point was made on what did and did not constitute an EBSA: it had been scrutinized by experts for its selection and its listing had been adopted by the CBD COP. An EBSA was not a marine protected area because it had no legal status or a management plan. It was rather a tool for identifying sites requiring better management by diverse means.

123. The current phase of the project focused on two axes: support (i) for building a framework with countries and competent organizations to facilitate the joint establishment of SPAMIs in open seas, including deep seas; and (ii) for improving the state of knowledge regarding open-sea and deep-sea ecosystems and their uses.

124. The Secretariat provided brief information on the work and consultation processes undertaken in different subregions (Alboran Sea, Adriatic Sea and the Sicily Channel/Tunisian Plateau) with the participation of the relevant Parties. In this context, the Secretariat commended the support provided by Italy, including funding, for the meetings held for the Sicily Channel/Tunisian Plateau (Sciacca, Italy, 13-14 April 2015) and the Adriatic Sea (Trieste, Italy, 22-23 April 2015).

125. Other activities were also supported by the project, such as the elaboration of a common strategy in the Mediterranean regarding spatial management measures to be agreed with relevant regional bodies. Its key elements were depicted in document UNEP(DEPI)/MED WG.408/17 entitled "Draft elements for a Common strategy among RAC/SPA, GFCM, ACCOBAMS and IUCN-Med, with collaboration of MedPAN".

126. The representatives of IUCN-Med and MedPAN, stressing that their organizations were involved in the joint strategy, expressed their willingness to participate and to contribute to this interesting coordination and synergy initiative.

127. With regard to the preparation of the Joint Strategy of RAC/SPA, GFCM, ACCOBAMS and IUCN-Med in collaboration with MedPAN (document UNEP(DEPI)/MED WG.408/17), the representative of ACCOBAMS thanked RAC/SPA for the initiative, which would support joint efforts and help to strengthen synergies in the actions and work programmes of ACCOBAMS, GFCM, RAC/SPA and IUCN-Med at a time when cooperation between those organizations continued to grow.

128. Responding to a question by a Focal Point, the Secretariat clarified that countries were expected to take note of the activity, which aimed to improve coordination among the related key regional organizations acting in common areas in the Mediterranean region.

129. The representative of Italy commented on the relevance of the project proposal on open seas and reminded the meeting that the EBSA process for the Mediterranean followed a route initiated by the Barcelona Convention. He also drew attention to the differences between MPAs and other measures of marine environment conservation, and to the fact that there were a number of legal instruments permitting conservation in open seas which did not necessarily involve the establishment of a network of protected areas. He stressed the importance of the full involvement of countries in the project and reinforcement of project management through a mechanism for consultation of States.

130. The representative of Tunisia said that her country was available to participate in a consultation process with respect to the establishment of SPAMIs in open seas. Tunisia was not ready for the time being to have a position on the issue.

131. The representative of ACCOBAMS congratulated RAC/SPA and the Parties to the Barcelona Convention on the work accomplished for the definition of EBSAs in the Mediterranean and on their adoption at the 12th meeting of the Conference of the Parties (COP 12) to the Convention on Biological Diversity (CBD). She pointed out that most of the areas included critical habitats for cetaceans and that their recognition as EBSAs was fully in line with the provisions of ACCOBAMS for the conservation of habitats. In that context, the meeting welcomed the proposal of the ACCOBAMS Secretariat representative to include documents UNEP(DEPI)/MED WG.408/Inf.11, UNEP(DEPI)/MED WG.408/Inf.15, UNEP(DEPI)/MED WG.408/Inf.19 and UNEP(DEPI)/MED WG.408/Inf.20 among the information documents for the next meeting of the Scientific Committee of ACCOBAMS to be held in October 2015.

132. The representative of Slovenia supported the continuation of the Adriatic process, not only for the declaration of SPAMIs but also for any kind of conservation process. 2020 was around the corner and there was an urgent need for action. It was important to be more active, in order to cope with the ongoing development of strategies and plans in other sectors such as maritime traffic, port infrastructure or hydrocarbons.

133. The meeting agreed to establish an informal working group to elaborate guidelines for the possible future continuation of the MedOpenSeas Project (following possible new financial support) on the basis of experience relating to the Adriatic Sea and the Sicily Channel/Tunisian Plateau. The following countries and organizations joined the working group co-chaired by the representatives of Italy and Tunisia: Croatia, Cyprus, Greece, Slovenia, ACCOBAMS, IUCN-Med and MedPAN.

134. The output of the working group, as reviewed and approved by the meeting, appears as Annex XIV to this report.

135. The representative of France expressed a reservation regarding the outcomes of the working group and informed the meeting that she would consult with the relevant authorities of her country before providing possible written comments on the issue.

136. The representative of Spain emphasized that the outcome of the working group was very general in terms of its approach to the Mediterranean EBSAs already identified. Nevertheless, it could be interpreted as being applicable to only three of the Mediterranean areas mentioned in the introductory part of the document. Spain would therefore prefer the document to be more clear and explicit, stating that its scope embraced the entire Mediterranean and omitting any mention of specific areas. She added that EBSA work was an obligation under the Convention of Biological Diversity and the role of Mediterranean Action Plan was to facilitate that work. Spain had some doubts about the establishment of management measures for EBSAs under MAP while the CBD was still considering the steps to be taken after their identification. She concluded that her delegation could not approve the document in its present form without a detailed analysis of its implications in respect of obligations under the CBD and MAP. Spain would continue considering the matter for the time being without committing itself to its final approval.

10.2.2 Activities for the development of a Mediterranean Marine and Coastal Protected Areas (MPAs) network through the boosting of MPAs creation and management

137. The Secretariat informed the meeting about the status of activities relating to the Regional Project for the Development of a Mediterranean Marine and Coastal Protected Areas (MPAs) Network through the Boosting of MPA Creation and Management, the “MedMPAnet Project”, implemented under the umbrella of the Strategic Partnership for the Large Marine Ecosystem of the Mediterranean (MedPartnership).

138. It provided a brief presentation of the general framework and objectives of the Project, as well as an overview of the activities implemented since the launching of the Project in April 2010, focusing mainly on achievements related to: (i) the identification and planning of new MPAs in order to expand

the regional network and enhance its ecological representativeness; and (ii) capacity-building, communication and awareness-raising activities aimed at improving MPA management.

139. Following the Secretariat's presentation, the representatives of the countries participating in the Project (Albania, Croatia, Egypt, Lebanon, Libya, Morocco, Montenegro and Tunisia) took the floor to provide supplementary information on the activities undertaken in their respective countries. They thanked RAC/SPA in that connection for the support it had provided for activities they had undertaken in the context of their national biodiversity conservation priorities.

140. Several country representatives commended the quality of the work accomplished under the Project and the relevance of the participatory and collaborative approach, particularly the involvement of representatives of civil society and of national and local NGOs in the process of developing coastal management plans for Project pilot sites. They also stressed the importance for the implementation of Project activities of existing collaboration, partnerships and synergies at both the national and regional level.

141. The representative of Morocco highlighted the relevance of the approach adopted in developing the management plan for Cap des Trois Fourches and suggested that a similar approach should be adopted in developing the management plan for the Djebel Moussa Site of Biological and Ecological Interest.

142. The representative of Egypt expressed his country's interest in completing the current assessment of the socio-economic framework of the Marine Protected Area of Sallum Bay. He requested RAC/SPA technical assistance with a view to carrying the process forward so that the management plan for the MPA in question could be elaborated.

143. While commending the quality of the capacity-building activities conducted under the MedMPAnet Project, several country representatives urged RAC/SPA to continue providing technical assistance for capacity development and capacity-building (on-job training, workshops, regional and national training sessions, etc.).

10.2.3 Evaluation of the Regional Working Programme for the Coastal and Marine Protected Areas in the Mediterranean Sea, including the High Sea

144. The Secretariat briefly presented the evaluation of the Regional Working Programme for the Coastal and Marine Protected Areas, including in the open seas and deep seas, adopted by the Contracting Parties in 2009. The evaluation report provided an overview of relevant initiatives at the international, regional or sub-regional levels and the status of activities implementation at the national level during the last five years (2010-2014). It emphasized that the main conclusions that emerged from

this evaluation were: (i) the significant role played by international and regional organizations in catalysing activities at country level, and (ii) the imbalanced geographical distribution of the Mediterranean MPAs and the need to improve their effectiveness and management.

10.2.4. Roadmap - Towards a comprehensive, ecologically representative, effectively connected and efficiently managed network of Mediterranean Marine Protected Areas by 2020

145. The Secretariat presented the Draft Roadmap for a comprehensive coherent network of well-managed MPAs to achieve Aichi Target 11 in the Mediterranean (document UNEP(DEPI)/MED WG.408/14), as requested by the Eighteenth Ordinary Meeting of the Contracting Parties to the Barcelona Convention (Decision IG.21/5).

146. Following comments by the participants and the debate on this agenda item, the meeting agreed on the following conclusions and next steps for the roadmap on Aichi Targets:

(i) As requested by the Eighteenth Ordinary Meeting of the Contracting Parties, the Roadmap should focus on providing guidance to the Mediterranean countries about steps that will help to achieve Aichi Target 11.

(ii) All activities to be undertaken by RAC/SPA in relation to the Roadmap should be fully in line with the orientations of the UNEP/MAP Mid-term Strategy for the period 2016-2021 and the biennium Programme of Work being developed by UNEP/MAP.

(iii) The Roadmap should be fully harmonized with the EcAp process of the Barcelona Convention, regarding the Ecological Objectives of particular relevance for biodiversity.

(iv) Taking into account the above points and the comments on and proposals concerning the Roadmap text made during this Twelfth Meeting of Focal Points, RAC/SPA will pursue, during the next two months, its consultation on the Roadmap with the Focal Points for SPAs and with the other MAP Components with a view to preparing a revised version of the Roadmap to be submitted, not later than the end of August 2015, as a document of the forthcoming MAP Focal Points meeting scheduled for mid-October 2015.

<u>Agenda item 11</u> Roundtable on funding of SAP BIO priority projects/activities

147. The RAC/SPA Director opened the session and thanked the representatives of donor organizations attending the roundtable for their interest (GEF, EC (by video conference), Prince Albert II of Monaco Foundation, Foundation Mohammed VI for Environmental Protection, GIZ Algeria Office).

148. The RAC/SPA Director communicated messages from the following donors who had expressed interest but were unable to attend the roundtable because they were otherwise engaged:

- LifeWeb Initiative had expressed its interest in RAC/SPA activities;
- CEPF had asked to be kept informed of the outcomes of the roundtable and wished to provide input for future events;
- MAVA Foundation had also asked to be kept informed of the outcomes of the roundtable and wished to provide input for future events;
- FFEM confirmed its interest in supporting the initiative;
- Total Foundation had found it to be an interesting initiative and wished to be kept informed of the outcomes of the roundtable;
- UfM was ready to support projects of regional interest.

149. The Director said that the purpose of the roundtable was to discuss the issue of fund-raising for the portfolio of projects and for other actions included in the SAP BIO at the national and regional level, and to enhance regional coordination and cooperation with a view to improving the effectiveness and efficiency of SAP BIO implementation. The roundtable aimed to give participants (countries, partners, etc.) the opportunity to be consulted and to have a face-to-face discussion on the financing of biodiversity conservation in the Mediterranean. This first roundtable could be followed by further ones in the future in order to conduct wide-ranging consultations with countries, partners, observers etc.

150. Pursuant to Decision IG.20/4, the Secretariat had prepared a first proposal with a list of project concepts for discussion (with a short description) to be implemented in 2016-2021.

151. The roundtable was organized as follows:

i. Presentation by RAC/SPA on the process launched in accordance with Decision IG.20/4 of the Contracting Parties, which requested the Secretariat to investigate options for ensuring appropriate financial support for the implementation of SAP BIO at the national and regional levels. The presentation included the portfolio of project concepts prepared in that context.
ii. Presentations by representatives of donor organizations, agencies and donors attending the roundtable about their principal domain of interest and their views regarding the project concepts in relation to their strategies, priorities and experiences in supporting projects in the Mediterranean.
iii. Debates.

152. The Secretariat updated participants on the history of the SAP BIO in order to bring everyone to the same level of knowledge for informed discussion. It recalled the first funding efforts and stressed

the priorities that had been addressed: (a) declaration of new MPAs; and (b) assistance to countries. It also briefed on the SAP BIO evaluation and analysis and its national and regional priorities and presented the 11 short concept project proposals, explaining that some of them were complementary to existing UNEP/MAP activities.

153. The representative of Italy welcomed the presence of so many donors. A number of interesting projects had been presented, but he stressed the importance of having an underlying strategy linking projects to the objectives and priorities identified by countries. It was also necessary to link project proposals with other processes such as the EcAp and to establish a formal consultation process with National Focal Points. He requested that National Focal Points should be able to amend the text and the list of partners proposed for the projects.

154. The representative of Cyprus supported the comment made by the representative of Italy and stressed the importance of involving the Eastern Mediterranean in the proposed project for monk seal conservation. She also said that her country might wish to collaborate more closely with ACCOBAMS, particularly with respect to highly mobile species, which were becoming a priority at the EU level.

155. The representative of Croatia highlighted that countries needed more time to prepare for discussions with donors, prior to the National Focal Points meeting.

156. The representative of Montenegro recommended holding consultations with National Focal Points and counting on those consultations to finalize the projects.

157. The representative of Slovenia agreed with the representative of Italy and he reiterated the interest of the Adriatic countries in the initiatives regarding the 11 project ideas.

158. The representative of Tunisia thanked RAC/SPA for organizing the roundtable during an NFP meeting, probably for the first time. She affirmed Tunisia's support for the project proposals, which were of interest to her country.

159. The RAC/SPA Director emphasized that the aim of the roundtable was to discuss and identify what was of interest and linked to the strategy and to further explore what could be done in relation to biodiversity. It would take time to fully identify the projects, since this was just the beginning. The Centre would later work in linkage with the mid-term assessments. The results of the discussions would feed the six-year mid-term programme 2016-2021. The roundtable was the first step towards gathering everyone's ideas. There was no intention to include or exclude any countries. That was not the spirit of the roundtable. The Centre was waiting for countries to convey their intentions.

160. The UNEP/MAP Deputy Coordinator reassured the countries that the projects were not yet ready for donors; they were project ideas. The UNEP/MAP Focal Points meeting the previous week had

given directions for the future Mid-Term strategy. That Strategy would provide the framework for such projects. The meeting had also provided an opportunity to discuss countries' priorities.

161. The RAC/SPA Director thanked delegates for expressing their opinions and advice frankly and transparently. He hoped that the Centre's intention had been clarified. The Secretariat was committed to continuing its work on the ideas and to developing them further, taking countries' comments and advice into account. There would be consultations on the relevant steps with all Contracting Parties through RAC/SPA Focal Points.

162. The Chairperson said that not many RAC/SPA National Focal Points were sufficiently familiar with the UNEP/MAP Mid-term Strategy. She therefore suggested that the Secretariat should provide them with the requisite information. The UNEP/MAP Deputy Coordinator explained the UNEP/MAP Mid-term Strategy and clarified that it was still being elaborated and that biodiversity was one of the pillars.

<u>Agenda item 12</u> 30th Anniversary of RAC/SPA (1985-2015)

163. The Director of RAC/SPA thanked all those who had shared their memories of the early years of RAC/SPA, especially during the cocktail organized by the Centre to celebrate its 30th anniversary on the first day of the meeting. He introduced the PowerPoint presentation of the Centre's historic background and said that the interviews conducted during the meeting would be incorporated in it later on. He then announced that the Secretariat would present the broad lines of the communication strategy. The strategy was designed to enhance the visibility not only of the Centre but also of the RAC/SPA Focal Points and partners.

164. The Secretariat also presented a brief review of the 30 years of RAC/SPA's existence, highlighting certain key events in the Centre's history.

165. The Secretariat then presented the broad lines of the draft communication strategy presented in document UNEP(DEPI)/MED WG.408/15. The main points are as follows:

- a summary of the diagnosis;
- action to be taken to enhance the Centre's visibility;
- the major lines of communication;
- financial needs and human resources;
- management of the communication function, with the creation of a communication unit and a data committee.

166. The representative of Slovenia said that the communication strategy was of great importance for the Centre and that he supported the initiative. He added that the contents of the document should have been included in the programme of work.

167. The representative of Montenegro said that the Centre's visibility should be enhanced and recommended preserving the logo. She agreed that the components of the communication strategy for RAC/SPA should have been included in the programme of work.

168. Mr. Mostafa Fouda, Resource Person – Secretariat, said that the RAC/SPA communication strategy should be consistent with regional conventions (Barcelona Convention) and international treaties (CBD, Ramsar, CMS, CITES). He added that the perception, attitudes and knowledge of the target public (decision-makers and "ordinary people") should also be examined and that the Secretariat should prepare a questionnaire during the current year and a second one in three or four years' time to assess progress made during the period as a whole. He further suggested publishing a book, in addition to the PowerPoint presentation and the animation film on the 30th anniversary of RAC/SPA, which could provide an overview of lessons learned and the prospects for the next 30 years.

169. The representative of IUCN suggested integrating partners and involving countries that wished to work with RAC/SPA in the communication unit.

Agenda item 13 **Programme of Work of RAC/SPA for the period 2016-2017**

170. The Director provided background information on the Programme of Work (PoW) and stated that the last MAP Focal Points meeting held the previous week had discussed and modified the Mid-Term Strategy (MTS) and the overall strategic framework in order to take into account the EcAp objectives and indicators. He stressed that there had been insufficient time to take into account the changes made by the MAP Focal Points in the PoW prepared for the current meeting. He proposed that the priorities of the main activities should be discussed. A revised version of the PoW would be prepared and forwarded within one month after the comments received by email from the SPA Focal Points had been taken into account. It would be submitted to the next meeting of MAP Focal Points scheduled for mid-October 2015.

171. In response to a request from the Chairperson of the meeting, the Deputy Coordinator made a brief statement on the preparation of the Mid-Term Strategy. He said that the structure of the MTS had been reviewed by the last MAP Focal Point Meeting. Therefore, the PoWs prepared by the various RACs and the Coordination Unit based on the initial draft of the MTS had not been in line with the Parties' request. The proposal of the UNEP/MAP Secretariat was to work on the new structure of the MST for the next three weeks and to return it to the MAP Focal Points for their reaction. Meanwhile, the RACs and the Coordination Unit would work in parallel to readjust the PoW accordingly.

172. The representative of Slovenia supported the proposed PoW and emphasized the huge number of activities that were planned compared with the available financial and human resources. He also proposed that the PoW should focus to a greater extent on the implementation of the adopted regional Action Plans for the Conservation of Threatened Species and Habitats.

173. The representative of Spain supported the Secretariat's proposal with a view to ensuring consistency with the EcAp process and the MTS.

174. The representative of Greece said that the Contracting Parties and Partners should be mentioned in the PoW. The Director stressed that the PoW was not complete at the present stage. He indicated that the proposed PoW was a first draft meant to be shared with the SPA Focal Points for a preliminary review.

175. The representative of Croatia stressed the need to take into account the review of the roadmap scheduled for the coming two months.

176. The IUCN-Med representative proposed expanding the activity aimed at revising the reference list of marine habitat types for the Mediterranean region to take into account not only dark assemblages but other habitats and species. The proposal was supported by the representative of Oceana.

177. Several partner organizations expressed their willingness to contribute in the elaboration of the PoW.

Agenda item 14 **Any other matters**

178. Under this agenda item, the representative of Tunisia invited RAC/SPA to develop a regional project concerning assistance to countries in developing alternative funding mechanisms for marine and coastal protected areas.

179. The Secretariat took note of the request and promised to incorporate it in its future projects concerning marine protected areas.

180. Several delegates took the floor to request clarifications regarding the post of Scientific Director of RAC/SPA. In this context, the Director of RAC/SPA and the Deputy Coordinator of UNEP/MAP, while stressing the importance of the post for the proper functioning of RAC/SPA, stated that the final decision on the matter would be taken at the level of the Contracting Parties and that the availability of the necessary budgetary funds was a factor to be taken into account. To that end, RAC/SPA would propose reconsidering the post in its draft budget for the 2016-2017 biennium.

Agenda item 15 **Adoption of the meeting report**

181. The Meeting reviewed the draft report prepared by the Secretariat, modified it and adopted the present report.

Agenda item 16 **Closure of the meeting**

182. After the customary exchange of courtesies, the Meeting was closed on Friday, 29 May 2015, at 1 p.m.

Annexes

Annex I	List of participants
Annex II	Agenda of the meeting
Annex III	Recommendations of the 5th Mediterranean Conference on Marine Turtles
Annex IV	Draft Updated Action Plan for the Conservation of Cetaceans in the Mediterranean Sea
Annex V	Recommendations of the 2nd Symposium on the Conservation of Marine and Coastal Birds
Annex VI	Recommendations of the 5th Mediterranean Symposium on Marine Vegetation
Annex VII	Recommendations of the 2nd Mediterranean Symposium on Coralligenous and other Calcareous Bio-concretions in the Mediterranean Sea
Annex VIII	Draft Updated Action Plan for the Conservation of the Coralligenous and other Calcareous Bio-concretions in the Mediterranean Sea
Annex IX	Recommendations of the 1st Mediterranean Symposium on the Conservation of Dark Habitats
Annex X	Draft Programme of Work for Reference Lists of Habitat types in the Mediterranean
Annex XI	Draft Updated Action Plan concerning Species Introductions and Invasive Species in the Mediterranean Sea
Annex XII	Preliminary list of projects proposed by the Secretariat for addressing SAP BIO funding needs
Annex XIII	Executive Summary of the Karaburun Sazan Marine Park proposed for inclusion in the List of Specially Protected Areas of Mediterranean Importance (SPAMI List)
Annex XIV	Recommendations by the 12th Meeting of the Focal Points for SPAs concerning the future development of the activities on MAPs in ABNJ and the expected new project on this issue

Annex I

List of Participants

List of Participants / *Liste des Participants*

REPRESENTATIVES OF CONTRACTING PARTIES
REPRESENTANTS DES PARTIES CONTRACTANTES

ALBANIA / *ALBANIE*

Ms. Irma BALLA
Expert in legal environmental issues
Ministry of Environment, Forest and Water Administration
Rruga e Durresit N° 27
Tirana, Albania
Tel: +355 4 227 0624
Fax: +355 4 227 0624
E-mail: irmaballa@hotmail.com

BOSNIA & HERZEGOVINA / *BOSNIE-HERZEGOVINE*

Ms. Vildana GOKOVIC
Hydro-Engineering Institute Sarajevo (HEIS)
Ministry of Physical Planning and Environment
Stjepana Tomića 1
71000 Sarajevo, Bosnia and Herzegovina
Tel: +387 33 207 949
Fax: +387 33 212 466/7
E-mail: vildana.gokovic@heis.ba

CROATIA / *CROATIE*

Ms. Ana KOBAŠLIĆ
Head of Service
Nature Protection Directorate
Service for Strategic Affairs in Nature Protection
Ministry of Environmental and Nature Protection
Radnicka cesta 80
10 000 Zagreb, Croatia
Tel +385 1 48 66 125
Fax: +385 1 48 66 100
E-mail: ana.kobaslic@mzoip.hr

Ms. Katja JELIC
Head of the Sea Section
Department for wild and Domesticated Taxa and Habitats
State Institute for Nature Protection
Radnicka cesta 80/7, 10 000 Zagreb, Croatia
Tel: +385 1 55 02 977
Fax: +385 1 55 02 901
E-mail: katja.jelic@dzzp.hr

CYPRUS / *CHYPRE*

Ms. Melina MARKOU
Fisheries and Marine Research Officer
Department of Fisheries and Marine Research
Ministry of Agriculture, Natural Resources and Environment
101 Vithleem Street, 1416 Nicosia, Cyprus
Tel: +357-22807841
Fax: +357-22775955
E-mail: mmarcou@dfmr.moa.gov.cy

EGYPT / *EGYPTE*

Mr. Mohamed Said ABDELWARITH
Marine Environment Researcher
Egyptian Environmental Affairs Agency (EEAA)
30 Misr Helwan Zyrae, Maadi
Cairo, Egypt
Tel: +20 225 487 91
Fax: +20 225 280 93
Mobile: +2 0 100 77 57 864
E-mail: mohamed7j@hotmail.com

EUROPEAN UNION (EU) / *UNION EUROPÉENNE (UE)*
(Via video-conference)

Anna KARASSZON
Project Officer
Marine Environment and Water Industry Unit
DG Environment
European Commission
Avenue de Baulieu 5, Brussels/Belgium
Tel: +32 2 296 1451
E-mail: anna.karasszon@ec.europa.eu

FRANCE / *FRANCE*

Ms. Maud CASIER
Coordinatrice internationale
Ministère français de l'Environnement (MEDDE) / Direction de l'eau et de la biodiversité (DGALN/DEB)
French Ministry of Environment / Water, Marine & Biodiversity Directorate
Coordination internationale / International Coordination (CI)
Bureau 05 / 56 - Tour Séquoia
92055 Paris La Défense, France
Tel: +33 1 40818606
E-mail: maud.casier@developpement-durable.gouv.

GREECE / *GRECE*

H. E. Mr. Yiannis TSIRONIS
Alternate Minister of Reconstruction of Production, Environment & Energy

Ms. Rebeca BATMANOGLOU
Director of the Directorate of Biodiversity Protection, Soil and Waste Management

Mr. Odysseas GOGOUSOS
Head of Biodiversity and Protected Ares Department

Ms. Maria PEPPA
Head of International Affairs Department and MAP Focal Point
E-mail: m.peppa@prv.ypeka.gr

Ms. Eleni TRYFON
Scientific expert
Protected Areas Department
Directorate of Biodiversity Protection, Soil and Waste Management, Biodiversity and
General Directorate of Environmental Policy
Ministry of Reconstruction of Production, Environment & Energy, 147 Patission Str
112 51 Athens, Greece
Tel: +30 210 8642276
Fax: +30 210 8623020
E-mail: e.tryfon@prv.ypeka.gr

Ms. Athena MOURMOURIS
Honorary Director General for the Environment
Ministry of Environment
Akti Moutsopoulou 25
18534 Piraeus, Greece
Tel: +30 697 458 1325
Fax: +30 210 411 1318
E-mail: athenamour@yahoo.co.uk

Mr. Michael STELLAKATOS LOVERDOS
Assistant Legal Adviser/Ministry of Foreign Affairs
10, Zalokosta Street, 106 71 Athens
Tel: +30 210 368 3647
E-mail: mstelak@mfa.gr

Mr. Ilias MAVROEIDIS
Scientific expert
Department of European & International Environment Affairs
Directorate of International and European Activities
Ministry of Reconstruction of Production, Environment & Energy
15, Amaliados str
115 23 Athens, Greece
Tel: +30 210 6426531
Fax: +30 210 6434470
E-mail: i.mavroidis@prv.ypeka.gr

Ms. Sofia REIZOPOULOU
EcAp online working group coordinator
Senior Researcher
Institute of Oceanography
Hellenic Center for Marine Research
46.7 km Athinon-Souniou Ave. Mavro Lithari
Anavissos, 19013 Attica, Greece
Tel:+30 2291076383
Mobile : +30 6977661222
E-mail: sreiz@hcmr.gr

ISRAEL / *ISRAËL*

Mr. Simon C. NEMTZOV
Coordinator for International Treaties
Israel Nature and Parks Authority
3 Am Ve'Olamo Street
Jerusalem 95463, Israel
Tel: +972-58-5063118
Fax: +972-2-5006281
E-mail: simon@npa.org.il

ITALY / *ITALIE*

Mr. Leonardo TUNESI
Research Executive
Head of the 3rd Department CRA 15 “Marine Habitats and Biodiversity Protection”
ISPRA – High Institute for Environmental Protection and Research
Via Vitaliano Brancati, 60 - 00144 Rome, Italy
Tel: +39 06 50074 776
Fax: +39 06 50074955
Mobile: +39 334 6243333
E-mail: leonardo.tunesi@isprambiente.it

Mr. Oliviero MONTANARO
Head of Unit VI "Marine and Coastal Environment Protection"
Italian Ministry of Environment, Land and Sea
Via C. Colombo 44 - 00147 Rome
Tel: +39.06.57228487
Fax: +39.06.5722.8424
Mob: +39 3293810308
E-mail: montanaro.oliviero@minambiente.it

LEBANON / *LIBAN*

Ms. Lara SAMAHA
Head of Department of Ecosystems
Directorate General of Environment
Ministry of Environment
Lazarieh Center, 8th Floor, Block A-4 New
P.O. Box: 11/2727, Beirut, Lebanon
Tel: +96 137 17 127
Fax: +96 119 76 535
E-mail: l.samaha@moe.gov.lb

LIBYA / *LIBYE*

Mr. Elmaki Ayad ELAGIL
Director of Nature Conservation Department
Environment General Authority (EGA) - Libya
Al-Gheran, Janzour, Tripoli
P.O. BOX 83618, Tripoli, Libya
Tel: +218 21 4873 764 (1119)
Fax: +218 21 4872 160
Mobile: +218 92 6508268
E-mail: makeeagalee@yahoo.com

MONACO / *MONACO*

Mr. Ludovic AQUILINA
Direction de L'environnement
3, Avenue de Fontvieille
MC 98000, Monaco
Tel: +377 98 98 19 65
Fax: +377 92 05 28 91
E-mail: luaquilina@gouv.mc

MOROCCO / *MAROC*

Mr. Abdennadi ABARKACH
Division des Parcs et Réserves Naturelles
Haut Commissariat aux Eaux et Forêts et à la Lutte Contre la Désertification
3, rue Harun Arrachid
Rabat - Agdal, Maroc
Tel: +212 5 37 67 27 70
Fax: +212 537 67 26 28
E-mail: abdennadi@yahoo.fr

MONTENEGRO / *MONTENEGRO*

Ms. Milena BATAKOVIĆ
Advisor for Biodiversity and SPA/BD Focal Point
Department for Monitoring, Analyses and Reporting
Environmental Protection Agency of Montenegro
IV Proleterske no. 19 81000 Podgorica, Montenegro
Tel: +38220446-506
Fax: +382 20 446 215 / 587
Mobile: +38267225504
E-mail: milena.batakovic@epa.org.me

SLOVENIA / *SLOVENIE*

Mr. Robert TURK
Head Regional Unit Piran
Institute of the Republic of Slovenia for Nature Conservation
TRG Etbina Kristina 1, 6310 Izola, Slovenia
Tel: +386 5 6710 901
Fax: +386 5 6710 905
E-mail: robert.turk@zrsvn.si

SPAIN / *ESPAGNE*

Ms. Elena ALCALDE CONSUEGRA
Technician on Marine Protected Areas
Division for the Protection of the Sea
General Directorate for Sustainability of the Coast and the Sea
Ministry of Agriculture, Food and Environment
Pl. San Juan de la Cruz
s/n. Madrid, Despacho: A-207, Spain
Tel.: +34 91 597 67 98
Fax: +34 91 597 59 24
E-mail: econsuegra@magrama.es

Ms. Guadalupe PINA
Consultant
Tragsatec S.A
Calle de Julian Camarillo 6B
28037 Madrid, Spain
Tel: 913 225 043
Fax: 913 322 60 05
E-mail: gpm@tragsa.es

TUNISIA / *TUNISIE*

Ms. Saba GUELLOUZ
Chargée de la Direction de la Gestion des Ecosystèmes Littoraux
Agence de Protection d'Aménagement du Littoral (APAL)
2 rue Mohammed Rachid Ridha
1002 Tunis-Belvédère, Tunisie
Tel: +216 71 908 566
Fax: +216 71 908 460
Mobile: +216 99 250 497
E-mail: s.guellouz@apal.nat.tn

TURKEY / *TURQUIE*

Mr. Güner ERGÜN
Branch Director
Ministry of Environment and Urbanisation
Directorate General of the Protection of Natural Assets
Mustafa Kemal Mahallesi Eskisehir Devlet Yolu (Dumlupmar Bulvari) 9 Km.
Cankaya / Ankara, Turkey
Tel: +90 312 222 1234 / 400
Fax: +90 312 222 26 61
E-mail: gnerergn@yahoo.com

REPRESENTATIVES OF OTHER INTERGOVERNMENTAL ORGANIZATIONS
REPRESENTANTS D'AUTRES ORGANISATIONS INTERGOUVERNEMENTALES

ACCOBAMS – Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area / *Accord sur la conservation des cétacés de la mer Noire, de la Méditerranée et de la zone Atlantique adjacente*

Ms. Célia LE RAVALLEC
Project Officer
Jardin de l'UNESCO, Terrasses de Fontvieille
98000 Monaco
Tel: +377 9898 4074
Fax: +377 9898 4208
E-mail: cleravallec@accobams.net

GEF – Global Environment Facility / *FEM – Fonds Mondial de l'Environnement*

Ms. Nicole GLINEUR
GEF Programme Manager
Natural Resources Division
GEF Secretariat
1818 H Street, NW
MSN P4-400 Washington D.C. 20433, USA
Tel: +1 202 473 25132
Mobile: +1 202 243 82 36
E-mail: nglineur@thegef.org

IUCN-Med – IUCN Centre for Mediterranean Cooperation / *UICN-Med – Centre pour la Coopération Méditerranéenne de l'UICN*

Mr. Alain JEUDY DE GRISSAC
Marine Conservation Programme Manager
UICN Centro de Cooperación del Mediterráneo
Parque Tecnológico de Andalucía
C. / Marie Curie, 22
29590 Campanillas (Málaga), Spain
Tel: +34 952 028 430 Ext. 304
Mobile: +34 693 813 972
E-mail: alain.jeudy@iucn.org

Ms. Maria Del Mar OTERO VILLANUEVA
Project officer
UICN Centro de Cooperación del Mediterráneo
Parque Tecnológico de Andalucía
C. / Marie Curie, 22
29590 Campanillas (Málaga), Spain
Tel: +34 952 028430
Fax: +34 952 028145
E-mail: mariadelmar.otero@iucn.org

REPRESENTATIVES OF NON-GOVERNMENTAL ORGANIZATIONS
REPRESENTANTS D'ORGANISATIONS NON-GOUVERNEMENTALES

CWS – Cyprus Wildlife Society / *Société Chypriote pour la Vie sauvage*

Mr. Andreas DEMETROPOULOS
President CWS
P.O Box 24281, Nicosia 1703, Cyprus
Tel: +357 994 28 508 / +357 223 50 316
Fax: +357 22 354 089
E-mail: andrecws@logos.cy.net

Ms. Myroula HADJICHRISTOPHOROU
Hon Secretary, CWS
P.O Box 24281, Nicosia 1703, Cyprus
Tel: 357 994 28 508 / 357 223 50 316
Fax: 357 22 354 089
E-mail: andrecws@logos.cy.net

Foundation Prince Albert II of Monaco / *Fondation Prince Albert II de Monaco*

Mr. Raphaël CUVELIER
Coordonnateur
Villa Girasole
16, Boulevard de Suisse
98000 Monaco
Tél : +377 98.98.44.44
Fax : +377 98.98.44.45
E-mail: rcuvelier@fpa2.mc

GIZ – Deutsche Gesellschaft für Internationale Zusammenarbeit / *Coopération internationale allemande*

Mr. Rolf DIETMAR
Directeur de programme
Programme "Gouvernance environnementale et biodiversité"GIZ en Algérie
39, rue Mohammed Khoudi El-Biar 16606 Alger,
Tel: +213 (0) 21 92 09 88/89
Fax: +213 (0) 21 92 09 90
Mobile: +213 (0) 560000096 / 661690051 (Alger)
Mobile: +49-15224680568 (D)
E-mail: rolf.dietmar@giz.de

Greenpeace International

Ms. Sofia TSENIKLI
Marine Policy Advisor
Greenpeace International,
Ottho Heldringstraat 5
1066 AZ Amsterdam, Netherlands
E-mail: sofia.tsenikli@greenpeace.org

HCMR – Hellenic Centre for Marine Research / *Centre Hellénique de Recherche Marine*

Mr. Panayotis PANAYOTIDIS
Research Director
Marine Biological Resources Institute
46,7 Km Athens-Sounion road
Anavissos GR-19013, Greece
Tel: +30 210 9832184
Fax: +30 210 9886337
E-mail: ppanag@ath.hcmr.gr

Ms. Argyro ZENETOS
Research Director
Marine Biological Resources Institute
PO Box 712, Mayro Lithari, Anavyssos GR 19013, Greece
Tel: +30 210 9856701
E-mail: zenetos@hcmr.gr

Mohamed VI Foundation for Environmental Protection / *Fondation Mohammed VI pour la Protection de l'Environnement*

Ms. Najia FATINE
Programme Officer / *Chargée de Programmes*
Km 3,2 Route de Zaërs, Avenue Mohammed VI, Rue El Madani Ibn Houssaïni, B.P. 5679, Rabat, Maroc
Tel: +212 (0)5 37 65 88 44 (Lignes groupées)
Fax: +212 05 37 65 55 31
Mobile: +212 (0)6 62 16 12 29
E-mail: n.fatine@fm6e.org

Mohammed V University - Morocco / *Université Mohammed V - Maroc*

Mr. Hocein BAZAIRI
Enseignant-Chercheur (Océanographie Biologique)
Laboratoire de Zoologie et Biologie Générale
Département de Biologie - Faculté des Sciences
4 Avenue Ibn Battouta
B.P. 1014 RP, Rabat, Maroc
Tel/Fax: +212 (0)5 37 77 54 61
Mobile: +212 (0)6 61 58 37 65
E-mail: hoceinbazairi@yahoo.fr; bazairi@fsr.ac.ma

MEDASSET – Mediterranean Association to Save the Sea Turtles / *Association méditerranéenne pour sauver les tortues marines*

Ms. Lily VENIZELOS
President
MEDASSET
1c Licavitou St.
106 72 Athens, Greece
Tel: +30 210 361 3572
Fax: +30 210 361 35 72
E-mail: lilyvenizelos@medasset.org

Ms. Liza BOURA
Programmes Officer
MEDASSET
1c Licavitou St.
106 72 Athens, Greece
Tel: +30 210 361 3572
Fax: +30 210 361 35 72
E-mail: medasset@medasset.org

MedPAN – Network of Marine Protected Areas Managers in the Mediterranean / *Réseau des Gestionnaires d'Aires Marines Protégées en Méditerranée*

Ms. Purificacio CANALS
President MedPAN
48, rue Saint-Suffren
13006 Marseille, France
Tel: +33 6 457 33 383
Fax: +33 491 48 77 14
E-mail: pcanals@tinet.org

Ms. Chloë WEBSTER
Scientific Officer
MedPAN
48, rue Saint-Suffren
13006 Marseille, France
Tel: +33 4 91 58 09 62
Fax: +33 4 91 48 77 14
Mobile: +33 6 78 73 32 34
E-mail: chloe.webster@medpan.org

OCEANA

Ms. Helena ALVAREZ
Leganitos 47, 6ª
28013 Madrid, Spain
Tel: +34 911.440.880
Fax: +34 911.440.890
E-mail: halvarez@oceana.org

WWF Greece / *WWF Grèce*

Mr. Spyros KOTOMATAS
Coordinator, CYCLADES Life Project
WWF Greece
Lempbesi 21
Athens GR-11721, Greece
Tel: +30.210.3314893 (ext. 113)
Fax: +30.210.3247578
E-mail: s.kotomatas@wwf.gr

WWF-MedPO – WWF Mediterranean Programme Office / *Bureau du Programme méditerranéen du WWF*

Mr. Giuseppe DI CARLO
Director
WWF - Mediterranean Marine Initiative
Via Po 25/C
Rome 00198, Italy
Tel: +393472972613
E-mail: gdicarlo@wwfmedpo.org

UNITED NATIONS ENVIRONMENT PROGRAMME - COORDINATING UNIT AND COMPONENTS OF THE MEDITERRANEAN ACTION PLAN
PROGRAMME DES NATIONS UNIES POUR L'ENVIRONNEMENT - UNITE DE COORDINATION ET COMPOSANTES DU PLAN D'ACTION POUR LA MEDITERRANEE

UNEP/MAP – United Nations Environment Programme / Coordinating Unit for the Mediterranean Action Plan - Barcelona Convention Secretariat
PNUE/PAM – Programme de Nations Unies pour l'environnement / Unité de Coordination pour le Plan d'Action pour la Méditerranée - Secrétariat de la Convention de Barcelone

Vassileos Konstantinou 48
Athens 11635, Greece
Fax: +30 210 7253196

Mr. Gaetano LEONE
Coordinator
Tel: +30 210 7273101
E-mail : gaetano.leone@unepmap.gr

Mr. Habib N. EL-HABR
Deputy Coordinator
Tel: +30 210 7273126
Mobile: +30 694 8834612
E-mail: habib.elhabr@unepmap.gr

Ms. Tatjana HEMA
Programme Officer
Mediterranean Pollution Assessment and Control Programme (MED POL)
Tel: +30 210 7273115
Mobile: +30 694 5935318
E-mail: tatjana.hema@unepmap.gr

Ms. Gyorgyi GURBAN
Ecosystem Approach Project Manager
Tel: +30 210 7273105
E-mail: gyorgyi.gurban@unepmap.gr

Mr. Lorenzo GALBIATI
MedPartnership and Climate Variability Project Manager
Tel: +30 210 7273106
E-mail: lorenzo.galbiati@unepmap.gr

Ms. Virginie HART
Mediterranean Marine and Coastal Expert
Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem (MedPartnership)
Tel: +30 210 7273122
Mobile: +30 695 7500671
E-mail: virginie.hart@unepmap.gr

Ms Katerina KATAMPELISI
EcAp Intern
E-mail: intern.ecap@unepmap.gr

SECRETARIAT / *SECRÉTARIAT*

RAC/SPA – Regional Activity Centre for Specially Protected Areas
CAR/ASP – Centre d'Activités Régionales pour les Aires Spécialement Protégées

Boulevard du Leader Yasser Arafat
B.P. 337, 1080 Tunis Cedex, Tunisia
Fax: (+216) 71 206 490
E-mail: car-asp@rac-spa.org

Mr. Khalil ATTIA
Director
Tel: (+216) 71 206 649 / 71 206 485 / 71 206 851
E-mail: director@rac-spa.org

Mr. Daniel CEBRİÁN MENCHERO
SAP BIO Programme Officer
Tel: (+216) 71 947 162 / 71 947 506
E-mail: daniel.cebrian@rac-spa.org

Ms. Souha EL ASMI
Specially Protected Areas | MedMPAnet Project
Programme Officer
Tel: (+216) 71 947 162 / 71 947 506
E-mail: souha.asmi@rac-spa.org

Mr. Atef LIMAM
MedMPAnet Project
Programme Officer
Tel: (+216) 71 947 162 / 71 947 506
E-mail: atef.limam@rac-spa.org

Ms. Dorra MAAOUI
MedMPAnet Project
Communication & Capacity-Building Assistant
Tel: (+216) 71 947 162 / 71 947 506
E-mail: dorra.maaoui@rac-spa.org

Mr. Atef OUERGHI
Data and Ecosystem Conservation | MedKeyHabitats Project
Programme Officer
Tel: (+216) 71 206 649 / 71 206 485 / 71 206 851
E-mail: atef.ouerghi@rac-spa.org

Mr. Yassine Ramzi SGHAIER
MedKeyHabitats Project
Technical Assistant
Tel: (+216) 71 206 649 / 71 206 485 / 71 206 851
E-mail: yassineramzi.sghaier@rac-spa.org

Ms. Lobna BEN NAKHLA
Species Conservation
Programme Officer
Tel: (+216) 71 206 649 / 71 206 485 / 71 206 851
E-mail: lobna.bennakhla@rac-spa.org

Mr. Dhia GUEZGUEZ
Programme Officer
Tel: (+216) 71 206 649 / 71 206 485 / 71 206 851
E-mail: dhia.guezguez@rac-spa.org

Ms. Naziha BEN MOUSSA
Administrative Assistant
Tel: (+216) 71 206 649 / 71 206 485 / 71 206 851
E-mail: naziha.benmoussa@rac-spa.org

Ms. Imtinène KEFI
Finance Assistant
Tel.: (+216) 71 206 649 / 71 206 485 / 71 206 851
E-mail: imtinen.kefi@rac-spa.org

Ms. Souad BEN AOUICHA
Scientific Unit Assistant
Tel: (+216) 71 206 649 / 71 206 485 / 71 206 851
E-mail: souad.benaouicha@rac-spa.org

Ms. Habiba MAKHLOUF
Director Assistant
Tel: (+216) 71 206 649 / 71 206 485 / 71 206 851
E-mail: car-asp@rac-spa.org

Mr. Mostafa FOUDA
Ressource Person
E-mail: foudamos@link.tn

Mr. Chedly RAIS
RAC/SPA Consultant
E-mail: chedly.rais@gmail.com

Ms. Purificació CANALS
RAC/SPA Consultant
E-mail: pcanals@tinet.org

Mr. Joacquim GARRABOU
RAC/SPA Consultant
E-mail: garrabou@icm.csic.es

Mr. Vasilis GEROVASILEIOU
RAC/SPA Consultant
E-mail: bill_ger@yahoo.com

Mr. Stelios KATSANEVAKIS
RAC/SPA Consultant
E-mail: skatsan@hcmr.gr

Ms. Patricia DEANE
English Reviser
E-mail: deanep7@gmail.com

Mr. Jean Pierre LERAY
French Reviser
E-mail: leray.engel@gmail.com

Mr. Lamine KHEDIRI
Translator / Interpreter
E-mail: laminekhediri@yahoo.fr

Ms. Françoise BRON-HADZINICOLAOU
Conference Interpreter
E.mail: f.bron@aiic.net

Ms. Myrto ROUSSOU-ATZITIRI
Conference Interpreter

Ms. Mary XIROYANNI
Conference Interpreter

Annex II

Agenda of the meeting

Agenda of the meeting

Agenda item 1	**Opening of the meeting**
Agenda item 2	**Rules of procedure**
Agenda item 3	**Election of officers**
Agenda item 4	**Adoption of the agenda and organization of work**
Agenda item 5	**Status of implementation of the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean**
Agenda item 6	**Species conservation**
	6.1. Action Plan for the Management of the Mediterranean Monk Seal & Regional Strategy for the Conservation of Mediterranean Monk Seal
	6.2. Action Plan for the Conservation of Mediterranean Marine Turtles
	6.3. Action Plan for the Conservation of Cetaceans in the Mediterranean Sea
	6.4. Action Plan for the Conservation of Bird Species listed in Annex II of the Protocol concerning specially protected areas and biological diversity in the Mediterranean
	6.5. Action Plan for the Conservation of Cartilaginous Fishes (Chondrichthyans) in the Mediterranean Sea
Agenda item 7	**Ecosystems conservation**
	7.1. Action Plan for the Conservation of Marine Vegetation in the Mediterranean Sea
	7.2. Action Plan for the Conservation of the Coralligenous and other Calcareous Bio-concretions in the Mediterranean Sea
	7.3. Action Plan for the Conservation of Habitats and Species associated with Seamounts, Underwater Caves and Canyons, Aphotic Hard Beds and Chemo-synthetic Phenomena in the Mediterranean Sea (Dark Habitats Action Plan)
	7.4. Activities for the elaboration of national inventories of natural sites of conservation interest
	7.5. Action Plan concerning Species Introductions and Invasive Species in the Mediterranean Sea

Agenda item 8 **Implementation of the Ecosystem Approach to the management of human activities that may affect the Mediterranean marine and coastal environment in the framework of the Mediterranean Action Plan (MAP)/Barcelona Convention (EcAp)**

8.1. Achievement of Good Environmental Status (GES)

8.2. Draft Integrated Monitoring and Assessment Programme

Agenda item 9 **The Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean region (SAP BIO) Strategic Goals and Priority Actions**

Agenda item 10 **Marine and Coastal Protected Areas, including in the open seas and deep seas**

10.1. List of Specially Protected Areas of Mediterranean Importance (SPAMI List)

10.1.1. Ordinary Periodic Review of the SPAMI List

10.1.2. Inclusion of areas in the SPAMI List

10.2. Regional Working Programme for the Coastal and Marine Protected Areas in the Mediterranean Sea including the High Sea

10.2.1. Activities for the identification and creation of SPAMIs in the open seas, including the deep seas

10.2.2. Activities for the development of a Mediterranean Marine and Coastal Protected Areas (MPAs) network through the boosting of MPAs creation and management

10.2.3. Evaluation of the Regional Working Programme for the Coastal and Marine Protected Areas in the Mediterranean Sea including the High Sea

10.2.4. Roadmap - Towards a comprehensive, ecologically representative, effectively connected and efficiently managed network of Mediterranean Marine Protected Areas by 2020

Agenda item 11 **Roundtable on the funding of the SAP BIO priority projects/activities**

Agenda item 12 **30th Anniversary of RAC/SPA (1985-2015)**

Agenda item 13 **Programme of Work of RAC/SPA for the period 2016-2017**

Agenda item 14 **Any other matters**

Agenda item 15 **Adoption of the meeting report**

Agenda item 16 **Closure of the meeting**

Annex III

Recommendations from the 5th Mediterranean Conference on Marine Turtles

Recommendations from the 5th Mediterranean Conference on Marine Turtles

The 5th Mediterranean Conference, held in Dalaman, Turkey, from April 19th to April 23rd , focused on the current knowledge about the demography of loggerhead (*Caretta caretta*) and green turtles (*Chelonia mydas*) nesting in the Mediterranean. The communications presented at the conference and the ensuing discussion lead to the creation of **demography working group**, responsible for the development of a research agenda aiming to create a demographic model that assists managers to predict the future trends of the populations of loggerhead and green turtles nesting in the Mediterranean. The members of the demography working group and their tasks are detailed below.

Members of the demography working group

Name	Task 1	Task 2	email
Broderick, Annette	nesting parameters	adult satellite tracking	A.C.Broderick@exeter.ac.uk
Camiñas, Juan Antonio	bycatch and post-release mortality		juanantonio.caminas@ma.ieo.es
Cardona, Luis	chair	juvenile isoscape	luis.cardona@ub.edu
Casale, Paolo	sex ratio at foraging grounds		paolo.casale1@gmail.com
Godley, Brendan	adult isoscape		b.j.godley@exeter.ac.uk
Hochscheid, Sandra	juvenile satellite tracking		sandra.hochscheid@szn.it
Kaska, Yakup	primary sex ratio		caretta@pau.edu.tr
Lazar, Bojan	juvenile satellite tracking		bojan.lazar@upr.si
Miaud, Claude	skeletochronology		Claude.MIAUD@cefe.cnrs.fr
Mifsud, Carmen	size of stranded turtles		Carmen.Mifsud@mepa.org.mt
Tomás, Jesús	aerial surveys		Jesus.Tomas@uv.es

Antonio Mazaris (amazaris@bio.auth.gr) offered his assistance for modeling if needed.

The task of the demography working group will start in May 2015, but the following provisional recommendations emerged from the Conference:

1. Collect the following information on a regular basis at nesting beaches and foraging grounds

   a. Nest counts

   b. Clutch size

   c. Emergency rate

   d. Primary sex ratio

   e. Clutch frequency

   f. Remigration interval

   g. Size of nesting females

   h. Proportion of neophytes

   i. Turtle abundance at foraging grounds through aerial surveys*.

   j. Size of stranded turtles

* Contact ACCOBAMS to explore synergies for aerial surveys.

2. Focus research efforts on the following issues:

   a. Remigration interval, number of clutches per female, female nest fidelity and primary sex ratio at Libya, Dalyan, Dalaman, Western Greece and Crete, central and eastern Turkey and Cyprus.
   b. Annual survival rate of females at Libya, Dalyan, Dalaman, Western Greece and Crete, central and eastern Turkey and Cyprus.
   c. Satellite tracking of adults nesting at Libya, Dalyan, Dalaman, central and eastern Turkey and Cyprus (here loggerheads only) to identify their foraging grounds. No more tracking effort is needed for loggerheads nesting in western Greece or Crete or for greens nesting in Cyprus.
   d. Create an isoscape of the Mediterranean Sea to identify the foraging area of nesting females.
   e. Assess the abundance of turtles in the Alboran Sea, Algerian Basin, the southern Ionian Sea, the Aegean Sea and the Levantine Sea through aerial surveys combined with satellite tracking of juveniles in the Aegean Sea and the Levantine Sea. Recent aerial surveys have been conducted elsewhere and suitable satellite tracking data already exist except for the Ionian Sea.
   f. Update bycatch figures at the Adriatic Sea, Aegean Sea, Levantine Sea, Northern Ionian Sea, Southern Ionian Sea and channel of Sicily, Tyrrhenian Sea, Liguro-Provenzal basin, Balearic Sea, Alboran Sea and the Algerian basin.
   g. Assess the post-release mortality rate of long-line bycaught turtles at the Northern Ionian Sea and the Southern Ionian Sea and channel of Sicily and the post-release mortality rate of bottom-trawl bycaught turtles at the Adriatic Sea, the southern Ionian Sea and channel of Sicily and Balearic Sea.

h. Assess the age at first maturity of turtles foraging at the Aegean Sea, Levantine Sea, Southern Ionian Sea and channel of Sicily, Tyrrhenian Sea, Liguro-Provenzal basin, Balearic Sea, Alboran Sea and the Algerian basin.
i. Assess the size of the turtles stranding at the Aegean Sea, Levantine Sea, Southern Ionian Sea and channel of Sicily, Tyrrhenian Sea, Liguro-Provenzal basin, Balearic Sea, Alboran Sea and the Algerian basin and assess their origin through genetic marker.

3. Create a database that allows managers fast and easy access to available information about sea turtles in order to allow them to take timely decisions. MEDPAN may assist in the creation of such a database.

Annex IV

Draft Updated Action Plan for the conservation of Cetaceans in the Mediterranean Sea

FOREWORD

The Action Plan for the conservation of cetaceans in the Mediterranean Sea was adopted by the Contracting Parties to the Barcelona Convention in 1991. It aims at ensuring the recovery of cetacean populations in the Mediterranean. The Action Plan was prepared using the information available about the cetacean populations and the threats hanging over them as known in 1991. However, aware that many important aspects of cetacean biology, behaviour, range and habitats in the Mediterranean were poorly known, the contracting Parties agreed that the Action Plan should be amended where necessary.

The objective of the amendments proposed in this document is to revise the list of "Additional Points for the Implementation of the Action Plan" (Appendix to the Action Plan, adopted by the Focal Points for SPAs in October 1992). The revised Appendix proposed hereinafter aims at providing new orientations for the Action Plan that are in line with the evolving regional context regarding cetacean conservation and with the new challenges and priorities as identified by the most recent scientific knowledge. Given the strong linkages between the Action Plan and the implementation of ACCOBAMS[1] in the Mediterranean, RAC/SPA collaborated closely with the Secretariat of ACCOBAMS in elaborating the revised Appendix.

[1] Agreement on the Conservation of Cetaceans in the Black Sea Mediterranean Sea and Contiguous Atlantic Area, concluded under the auspices of the Bonn Convention on the Conservation of Migratory Species of Wild Animals (CMS)

ACTION PLAN FOR THE CONSERVATION OF CETACEANS IN THE MEDITERRANEAN SEA

Amended Appendix:
Additional Points for the Implementation of the Action Plan for the period 2016-2020

Taking into account (i) the work done at national level for the conservation of cetacean species in the Mediterranean since the adoption of the Action Plan in 1991, (ii) the progress made so far in the implementation of the provisions of ACCOBAMS in the region and (iii) the available knowledge about the status of the Mediterranean cetacean populations, the Contracting Parties to the Barcelona Convention are invited to orient their action regarding the implementation of the Action Plan towards the following priorities during the period 2016-2020.

Legal and institutional measures

- To ratify the ACCOBAMS Agreement, if they have not already done so, and to implement its Resolutions and Recommendations of relevance for the Mediterranean Sea. As agreed during the 14th Ordinary Meeting of the Contracting Parties to the Barcelona Convention (Portoroz, Slovenia, November 2005), the common obligations relating to cetaceans under the SPA/BD Protocol are fulfilled by the implementation of ACCOBAMS. In this context, close cooperation at the national level between the SPA/RAC National Focal Points and the ACCOBAMS Focal Points is highly recommended.
- To ensure that cetaceans are covered, at national level, by appropriate regulation measures providing for the elimination of deliberate killing and for the mitigation of the adverse impacts from their interactions with human activities, in particular in relation to:
    - bycatch and depredation in fishing gears,
    - seismic surveys and other marine noise generating activities,
    - harassment by leisure boating and scientific activities and
    - collisions with ships (ship strikes)
- Ensure, through regulation or other appropriate approaches, that whale-watching activity is environmentally sound and sustainably conducted, using, as appropriate, high quality certification systems for whale-watching.
- Where relevant for cetacean conservation, to support the use of the compliance mechanisms set for the Barcelona Convention and the ACCOBAMS Agreement, in particular by encouraging the notification of non-compliance and of non-follow-up cases.
- RAC/SPA should pursue its collaboration with the Secretariat of ACCOBAMS, by facilitating the implementation of the Annex 2 (Conservation Plan) of ACCOBAMS, in particular in fulfilling its function of the Regional Coordination Unit for the Mediterranean of the ACCOBAMS Agreement.

Improving the knowledge about cetacean populations

- Considering the urgent need of obtaining reliable estimates of cetacean populations and data about their distribution, a special effort should be done in the period 2016-2020 to undertake the comprehensive survey of abundance and distribution of cetaceans being planned by ACCOBAMS (ACCOBAMS Survey initiative). Their contribution (funding, equipment, vessels, planes, etc.) and the involvement of their scientists in all the survey phases (planning,

field work and data analysis) being a key factor for the success of the Survey, the Contracting Parties should facilitate and support the Survey Initiative and liaise closely with RAC/SPA to ensure that the data collected by the Survey serve also as baseline data for the Good Environmental Status concerning cetacean species as defined by the contracting Parties under the Ecological Objective 1 of the EcAp process.

Reducing cetacean-fisheries interactions

- To assess the cetacean bycatch and depredation in their fisheries and adopt mitigation measures taking into account the requirements for cetacean conservation and the need for the development of sustainable and responsible fishing activities. In this context, the Contracting Parties are invited to conform to the recommendations from ACCOBAMS and GFCM on this issue.
- RAC/SPA should strengthen its collaboration with the Secretariats of ACCOBAMS and GFCM to provide assistance to the Mediterranean countries in mitigating the impacts of the interactions occurring between cetacean species and fishing activities, through investigating innovative and environmentally sound mitigation measures and by disseminating information on relevant best practices and successful initiatives.

Mitigating the impact of underwater noise

- Pursue the development and the implementation of a basin-wide strategy for underwater noise monitoring in the Mediterranean, as proposed by the ACCOBAMS/ASCOBANS/CMS Joint Noise working group, under the Ecological Objective 11 of the EcAp process.
- Development of acoustic mapping using standardised methodologies to build a comprehensive picture of the spatial and temporal distribution of anthropogenic noise sources. Mapping effort should be deployed in the noise hotspot areas identified in the Mediterranean by ACCOBAMS, taking into account the available knowledge regarding the distribution of cetacean species, including areas that are affected at different levels of noise.
- Promote awareness of the anthropogenic noise impacts on cetaceans, targeting in particular decision makers, key players in the industry organisations and the stockholders in the shipping sectors.
- Considering the increasing number of seismic surveys in the Mediterranean Sea, RAC/SPA should liaise closely with the Secretariat of ACCOBAMS, the national authorities of the Mediterranean countries and relevant companies to promote the collection and dissemination of cetacean data from MMOs (Marine Mammal Observers) during seismic surveys.

Habitat conservation

- In addition to implementing the provisions of the relevant international and regional agreements related to combatting pollution and eliminating sources of degradation of the marine environment (IMO regulations, relevant Protocols of the Barcelona Convention, Convention on Biological Diversity, etc.), each Contracting Party should establish a list of marine areas under its jurisdiction identified as of special importance for cetaceans, using as appropriate the tools developed at regional and international levels for inventorying sites of conservation interest, in particular the list of areas of special importance for cetaceans in the ACCOBAMS area .
- The areas of special importance for cetaceans should be granted a protection status that ensures the long term preservation of the species and the sustainable management of human activities having impacts on cetaceans.

Annex V: Recommendations of 2nd Symposium on the Conservation of Marine and Coastal Birds in the Mediterranean

Recommendations of 2nd Symposium on the Conservation of Marine and Coastal Birds in the Mediterranean

The participants from 14 Mediterranean countries attending the 2nd Symposium on the Conservation of Marine and Coastal Birds in the Mediterranean, organized by RAC-SPA (Mediterranean Action Plan), Medmaravis and Les Amis des Oiseaux (BirdLife partner in Tunisia), under the auspices of Conservatoire du Littoral (France) and Tour du Valat Biological Station,

1. being aware of the rapidly deteriorating ecological conditions, in some Mediterranean regions, of various marine and coastal bird species and their habitats which are threatened by unsustainable coastal development, overfishing, bycatch (= accidental mortality of seabirds caused by fishing gear), invasive predators, lack of effective management in protected areas such as Specially Protected Areas, human disturbance in breeding colonies, illegal hunting and pollution from several sources,

Urge the Barcelona Convention Secretariat to call up on its Contracting Parties including the European Union:

- to devote special attention to the study and conservation of the Critically endangered Balearic Shearwater *Puffinus mauretanicus*, which is experiencing a sharp decline which may lead to its extinction in a few decades, and to extend and implement the EU Action Plan for the conservation of the species in all relevant countries including those in North Africa;

- to conduct population studies on the Yelkouan Shearwater *Puffinus yelkouan*, and more particularly its movements through the bottlenecks of the Bosphorus and Dardanelles;

- to launch research projects and an effective conservation plan for the populations of Audouin's Gull *Larus audouinii* which are at present decreasing in most of the species' range, particularly in the central and eastern Mediterranean;

- to aid census programmes of seabird populations which need to be carried out simultaneously with a common protocol in all countries holding key breeding populations, especially in countries lacking census data;

- to encourage the continuation of long-term monitoring in a number of key and representative colonies and to aid the launching of new long-term monitoring programmes in countries lacking such surveys;
  - to encourage the continuation of long-term assessments of seabird distribution patterns at sea, by boat surveys and GPS tracking, and to aid the launching of new surveys in countries lacking such data, as well as in international waters, which would serve as a platform of cooperation among neighbouring Mediterranean countries;
  - to promote, for species whose breeding habits (i.e. nocturnal attendance, nesting in crevices and caves in small islets and sea cliffs) make difficult to come out with accurate population estimates, the establishment of a set of key colonies of reference where detailed monitoring of nests is conducted, in order to properly estimate demographic parameters (breeding success, survival, recruitment, rate of sabbaticals, etc.) that ultimately will allow to assess population trends;
  - to assist in the establishment of research programmes related to seabird bycatch, particularly of shearwaters on longlines, tuna fish decoys, illegal driftnets and other potentially impacting fishing techniques, as well as to work out and implement effective mitigation measures to reduce bycatch mortality of seabirds and seek coordination with existing Mediterranean initiatives such as GFCM/35/2011/3 recommendation on reporting and reducing seabird bycatch;

- to enforce existing EU regulations (e.g. 1143/2014 of 22 Oct. 2014) which address the issue of the eradication of invading predators threatening breeding populations of seabirds, to implement adequate management measures in order to control such a threat, and to establish similar regulations in non-EU Mediterranean countries;
- to launch census surveys on coastal species, particularly on the dwindling populations and habitats of Kentish Plover *Charadrius alexandrinus* and Greater Sand Plover *Charadrius leschenaulti*, listed in Annex 2 of the Barcelona Convention;

2. realising that various coastal habitats are being degraded rapidly by development in the Mediterranean region, due to the lack of adequate protection, the contracting parties of the Barcelona Convention are urged:

- to provide adequate legal protection and an effective conservation management plan to all marine and coastal Important Bird Areas (IBAs) throughout the Mediterranean, whether or not they are designated as a Specially Protected Area of Mediterranean Importance (SPAMI);

- to accelerate the approval of management plans for the already existing marine and coastal protected areas, particularly where draft plans have been properly elaborated, including successful participatory processes such as occurring in the Balearic Islands;

- to introduce a Diploma award system, similar to the European Diploma for Protected Areas used by the Council of Europe, to honour outstandingly managed SPAMIs;

3. considering the acute need for efficient long-term conservation measures in coastal habitats and hotspots threatened by unsustainable coastal development, the contracting parties are urgently requested:

- to stop all further deterioration and afford an effective long lasting conservation status of key salt marsh sites holding internationally important populations (breeding, wintering or migrating) of coastal bird species listed in Annex 2 of the Barcelona Convention, such as found in the Gediz delta and in the Ulcinj salt pans;
- to provide effective protection to the three breeding sites in the Mediterranean of the Lesser-crested Tern *Sterna bengalensis*, which are threatened by coastal development and human disturbance, partly due to lack of public awareness;
- to launch an in-depth survey of the conservation status and priorities of the very few tidal wetlands existing in the Mediterranean, concentrated around the Gulf of Gabès (from Sfax to Zuwara) and in the northern Adriatic (from Ravenna to Trieste), bearing in mind that functional alterations of these fragile and irreplaceable ecosystems may lead to consequences affecting huge numbers of coastal and wetland bird species, many of which are threatened;

4. realising that various offshore oil and gas drilling platforms are being initiated in the Mediterranean Sea, especially in the North-Western part of the Mediterranean and in the Adriatic, without appropriate analyses of the ecological impacts on marine wildlife and seabirds, the participants of the Hammamet 2015 Symposium urge the governments concerned to carry out in-depth and impartial Environmental Impact Assessments of these projects including:
- the assessment of all operational impacts of drilling activities, as well as those likely to occur by accident, on the marine ecosystems, particularly on seabirds;
- the assessment of potential risk of oil pollution at sea endangering the vulnerable marine and coastal ecosystems;
- the identification of compulsory compensation measures in case of occurrence of such impacts;
- the recruitment of ornithologists and marine biologists of vast Mediterranean experience, in the assessment processes, as well as making full use of the existing literature and databases existing at national and international levels;

5. the participants of the 2015 Hammamet Seabird symposium would like to thank the Regional Activity Centre for Special Protected Areas (RAC-SPA) for organising this successful symposium and would

like to extend a vote of thanks to the Tunisian association Les Amis des Oiseaux, BirdLife partner in Tunisia, for its invaluable help in the organisation, its warm welcome and hospitality enjoyed by all participants.

Annex VI

Recommendations of the 5th Mediterranean Symposium on Marine Vegetation

Recommendations of the 5th Mediterranean Symposium on Marine Vegetation

Portoroz, Slovenia, 27-28 October 2014

Scientific interest in the Action Plan

Generally speaking, there has been increased interest in the knowledge of marine plant species and growing scientific attendance, plus greater geographical diversity, at the 'Marine Vegetation' Symposium.

Most of the papers (81%) concern marine magnoliophytes, particularly Posidonia meadows (59%), though there is growing interest in other marine magnoliophytes (19%), particularly the Fucales, notably the Cystoseira genus.

In the papers, the major role played by Marine Protected Areas in conserving marine plants was highlighted, but the continuation of illegal trawling practices constitutes a significant danger to plant formations, especially Posidonia meadows.

Recommendations

Much has been done regarding the knowledge and monitoring of plant formations, and new data is now available even though there is still a lack of balance between the countries of the north-western Mediterranean and those of the southern shore and the eastern basin. Efforts here must be kept up; particularly the need to integrate this data to adapt the existing protocols to the specific features of these sub-regions (defining reference conditions, oligotrophy of water, etc.)

→Pursue and amplify the procedure initiated by RAC/SPA within the framework of the MedPosidonia and MedKeyHabitats programmes, with particular attention paid to the eastern basin and the southern shore of the Mediterranean.

The scientific community highlighted the general regression of Fucales (e.g. Cystoseira forests, gulfweeds) even though putting the Cystoseira genus on Annex II of the SPA/BD Protocol has been a significant advance. As well as taking into account such regulatory aspects, it is necessary to enhance national capacities to get a Mediterranean-scale overall vision

→ Mobilise all the actors as to the interest of these formations (distribution, dynamics) and the need to identify the origin of the regressions observed, in order to suggest concrete steps likely to solve this problem (e.g. being taken into account in the context of impact studies)

Regulations that are indispensable for conserving vegetation exist in almost all the countries. However, the difficulties encountered in enforcing these persist, particularly because of illegal fishing activities. A special effort must be made to make the Focal Points aware of this, for this lacuna is responsible for significant regressions

→Draw up an updated assessment of the direct and indirect regulatory measures (regulating human-origin activities that affect these formations) that aim at protecting and conserving the species in the Action Plan on the Conservation of Mediterranean Marine Vegetation, working alongside the General Fisheries Commission for the Mediterranean

Guidelines for mapping and monitoring are an interesting element but there is still a need for simpler, more robust and non-destructive tools to assess the conservation state of marine plants. Similarly, synergy of actors (scientists, managers) and the widest possible provision of the available data would certainly enable the means to be optimized. The need to have long-term monitoring (chronological

series) was recalled; it remains an indispensable precondition for better grasping the changes that have been observed

→Make exchange of data possible, especially under the aegis of RAC/SPA, by improving the functionality of the current internet site.

Annex VII

Recommendations of the 2nd Mediterranean Symposium on Coralligenous and other Calcareous Bio-concretions in the Mediterranean

Recommendations of the 2nd Mediterranean Symposium on Coralligenous and other Calcareous Bio-concretions in the Mediterranean

Portoroz, Slovenia, 29-30 October 2014

In the light of the work presented at this Symposium, we should stress the strides made in knowledge of these formations since the first, Tabarka, Symposium in 2009. The strong participation of the Mediterranean scientific community, and the quality and number of the papers, confirm the interest of these meetings.

The main concerns are both the acquisition of new knowledge about the species or the distribution of these formations, and the means of understanding their good ecological state and how to conserve them more efficiently.

The introductory session presented the CIGESMED Programme, which, based on the coralligenous, aims at identifying indicators for assessing and monitoring the good ecological state of the coastal waters of the Mediterranean. One specific feature of the project is the geographical area that it addresses (the western and eastern basins).

Session 1 aimed to give an appraisal on the progress that has been made in the knowledge of coralligenous formations.

The discussions particularly addressed the standardization of methods for data comparison. The diversity of approaches and tools is a result of the multiple objectives pursued. Recourse to several complementary tools was often noted, and a predominance of non-destructive methods (photographs, videos, ROV, acoustic detection methods) was recorded.

There is an obvious need to have the same type of data in order to compare it over several scales and biogeographical areas. What is important is to make sure that the data is reproducible, reliable, and representative, given that the aim is always to best adapt the sampling effort to these parameters. It is also interesting to be able to keep the raw data in order to re-study it, given that one of the limiting factors is often the qualification of the operator. Some participants recalled the need to have user-friendly tools for monitoring these formations.

Session 2 addressed the impact of global change.

The work presented showed marked differences in terms of the vulnerability of the structuring species of the coralligenous (*Cladocora caespitosa*, *Corallium rubrum*, *Paramuricea clavata*) and stressed the risks of significant changes (disappearance or appearance of new species), things which are likely to restrict these formations' capacity for recruitment and restoration. Future development of the work could consist of better identifying the share of environmental change, specifically linked to climate change, in degrading other environmental factors.

Session 3 was devoted to the mapping and monitoring of coralligenous habitats.

Discussions stressed the great diversity of these formations and the complexity of the coralligenous and other bioconstructions, and the chance offered to the scientific community to discuss and propose new facies for integration within the Barcelona Convention's Habitats List. These lists can later be taken into consideration in the context of the European Commission's normative approaches.

The impact of fishing activities on coralligenous populations was mentioned by several participants; they argued that it is difficult, even within the MPAs, to find formations that are unharmed by any form of fishery (traditional, recreational or commercial).

Session 4 concerned genetic studies of key species of the coralligenous.

Genetics seems to be an innovative tool that can perhaps respond more efficaciously to the requirements of the identification of sites, adapted to the conservation of coralligenous formations and to the

prediction of impacts linked to climate change. In the light of these techniques' potential, it was suggested that they be extended to other species and other parts of the Mediterranean.

During the discussion that followed, the interest of multidisciplinary approaches was mentioned with particular attention to the geomorphologic aspects that are important elements in the structuring of the coralligenous. As well as lists of characteristic species of the coralligenous formations, it would be useful to record the features of the habitat sampled.

Session 5 has concerned management of coralligenous habitats and other bio concretions.

This session revealed that anthropogenic pressures on coralligenous habitats are apt to affect the deepest sites. Although many economic actors (e.g divers, fishermen, coral divers) seem to be aware of the conservation issues in these habitats, it appears necessary to better evaluate and quantify the pressures exerted in standardized approach that can be comparable on a large scale

The discussion allowed to highlight the importance of shared and open information systems, where data on the ecological status and pressures would be accessible, standardized and therefore comparable. Although some broadcast platforms exist, an effort could be made in terms of availability and reliability. It was recalled that despite the emergence of new indicators to compare the ecological status or the pressures on these habitats, evaluation is often based, for lack of sufficient resources, solely on expert opinion. In the same way, several participants highlighted the dramatic lack of mapping data on these habitats for the Southern and Eastern Mediterranean.

The round table on updating the list of species to be taken into consideration in the context of mapping and monitoring habitats aroused the interest of participants in this type of approach. However, no consensus emerged as to the amendments to be made to the current list. In this respect, the participants suggest setting up, under the aegis of RAC/SPA, theme-based working groups (list of typical species, genetics, mapping, state of conservation etc.). The aim would be using themes to group efforts (synthesis of current knowledge, standardizing work methods, etc.), and sharing information to propose *in fine* conclusions likely to give better management and conservation of the coralligenous and other Mediterranean bioconstructions.

The round table on protecting coralligenous habitats based on scientific knowledge and the present legislative context recalled that European laws ban trawling over the coralligenous, rhodolith beds and marl. The absence of an official map of the distribution of these beds acts as a brake on implementing the regulations. It is thus necessary that already available information be handed to the competent bodies. The interest in making the public aware of the importance of these formations was recalled.
An assessment of the ecosystem services rendered by these formations would also help their economic value to be highlighted.

In the light of all these considerations, the participants advise:

- encouraging the states to elaborate their National Action Plans for the protection of the coralligenous and other bioconstructions and start implementing these as soon as possible
- urging the states to validate existing maps so that these may be taken into consideration in the context of implementing regulations on commercial fisheries
- suggesting that RAC/SPA:

    - ✓ Set up collaborative tools to help scientists to exchange data and share their experience
    - ✓ Help countries start awareness campaigns on the interest of protecting coralligenous habitats and training and capacity-building sessions
    - ✓ Start addressing the assessment of ecosystem services rendered.

Annex VIII

Draft Updated Action Plan for the Conservation of the Coralligenous and other Calcareous Bio-concretions in the Mediterranean Sea

Draft Updated Action Plan for the Conservation of the Coralligenous and other Calcareous Bio-concretions in the Mediterranean Sea

I. Current situation of coralligenous assemblages

I.1. Current knowledge

1. At present there is a general knowledge on the distribution, species composition and functioning of coralligenous assemblages and other calcareous bio-concretions. However, and despite the efforts conducted since the adoption in 2008 of the Action Plan for Coralligenous and other Calcareous Bioconstructions, in the Mediterranean, there are essential questions that need to be addressed to guarantee the conservation of these emblematic Mediterranean habitats (see specific sections).

2. Probably the number and quality of presentations during the 2nd Mediterranean Symposium on the Conservation of coralligenous and other calcareous bio-concretions (Portorož Eslovenia 29-30 October 2014) are the best example on the interest of Mediterranean scientific/managers community to improve the knowledge on these assemblages (Proceedings 2nd MSC&CBC 2014).

3. Despite of this, it was also noted that (i) most actions regarded individual- national- based efforts (ii) the lack of structures for coordination in an efficient way regional and/or pan-Mediterranean research actions. There was a general consensus at the Symposium to establish a series of Working Groups to coordinate the human and resources in order to provide the needed general view on the coralligenous/maërl assemblages these gaps.

I.2. Distribution

4. Coralligenous buildups and maërl beds are common all around the Mediterranean coasts, even in the easternmost coasts (Giakoumi et al. 2013, Martin et al. 2014). The coralligenous habitats are abundant in the Adriatic, Agean and Thyrrhenian Seas as well as in the Algero-Provençal Basin. The coralligenous is less abundant in the Levantine Sea and Tunisian Plateau/Gulf of Sidra (Maritn et al. 2014). Overall, data available cover approximately 30% of the Mediterranean coasts while for the remaining 70% no information was found (Martin et al. 2014). Regarding the depth distribution, most information concern the 10 to 50 m depth less information exists for the deeper range of distribution of coralligenous 50-200 m depth. Besides these large-scale assessments on distribution, at local scale some progress cartographical data have been acquired in some areas specially in marine protected areas (e.g. Réserve Naturelle de Scandola, Parc National de Zembra, Area Marina Protetta di Tavolara Punta Coda Cavallo, Zakynthos Marine Protected Area). Overall, we lack of a complete and precise distribution information on coralligenous and other calcareous bioconstructions habitats.

5. The main constrains to the provide a global view on the distribution of coralligenous and other calcareous habitats are the (a) their intrinsic heterogenous distribution related with the spatial patterns of the geophysical and oceanographic conditions allowing their development, and 2) the technical and financial constraints of mapping field operations resulting in an unbalanced mapping efforts across the Mediterranean.

6. Geographical as well as depth distributional data are essential in order to know the real extent of these assemblages in the Mediterranean Sea as well as to implement appropriate management measures to guarantee their conservation.

I.3. Composition

7. Coralligenous concretions are the result of the building activities of algal and animal builders and the physical as well as biological eroding processes. The final result is a very complex structure composed of several microhabitats. Environmental factors (i.e., light, water movement and sedimentation rates) can vary by orders of magnitude in parts of the same concretion situated very close to each other. This great

environmental heterogeneity allows several different assemblages to coexist in a reduced space. Assemblages situated in open waters (from horizontal to almost vertical surfaces) can be easily distinguished from those situated in overhangs and cavities.

8. Algae usually dominate in horizontal to sub-horizontal surfaces although their abundance decreases with decreasing irradiance. Two main algal communities have been distinguished in the western Mediterranean: an assemblage dominated by *Halimeda tuna* and *Mesophyllum alternans* (*Lithophyllo-Halimedetum tunae*), thriving in relatively high light levels, and an assemblage dominated by encrusting corallines (*Lithophyllum frondosum, L. cabiochae, Neogoniolithon mamillosum*) and *Peyssonnelia rosamarina* (*Rodriguezelletum strafforelloi*), and receiving low light levels.

9. Animal assemblages can greatly differ according to light levels reaching the coralligenous outcrop but also in relation to current intensity, sedimentation rates and geographical areas. In the richest, relatively more eutrophic zones, with rather constant and low water temperature, gorgonians usually dominate the community, but they are completely absent or rare in the more oligotrophic or low-current areas with rather high or seasonally variable temperature, being replaced by sponges, bryozoans or ascidians.

10. Maërl beds are also very diverse. Even if corallines are the main constituents (*Spongites fruticulosus,Lithothamnion corallioides, Phymatolithon calcareum, Lithothamnion valens, Lithothamnion minervae,Litophyllum racemus, Lithophyllum frondosum*, and others), Peyssonnelia species (mainly *Peyssonnelia rosa-marina*) can also be very important. The cover of erect algae depends on each particular site, displaying several facies (*Osmundaria volubilis, Phyllophora crispa,* Kallymeniales, *Laminaria rodriguezii*).

11. The group of experts in Tabarka suggested using the Reference List of Habitat types appearing in the Standard Data-entry Form (SDF) for National Inventories when looking for the composition of coralligenous assemblages. In 2011 a list of species to be considered in the inventory and/or monitoring of coralligenous communities was provided by UNEP-RAC/SPA (2011)[2]. The species were arranged in the following categories:

    - Algal builders
    - Animal builders
    - Agglomerative' animals
    - Bioeroders
    - Species of particular importance (particularly abundant, sensitive, architecturally important or economically valuable)
    - Invasive species

12. The characterization of coralligenous based on the above-mentioned categories list can greatly help in our understanding on the coralligenous patterns across the Mediterranean. Since different regions and areas within regions are characterized by different composition, the assessment considering the proposed morpho-functional categories can provide an interesting comparative basis towards a general view on Mediterranean coralligenous assemblages. This approach besides the composition data would provide a functional perspective which greatly facilitate the development of indicators for the monitoring of the Good Envrionmental Status (GES) within the Marine Strategy Framework Directive and "COP18 EcAp Decision" (see Legislation and regulation section).

13. The suggestion when describing the composition of the coralligenous assemblages or the maërl beds would be to provide quantitative or semi-quantitative estimate on the abundance of typical/indicator species. Different visual and photographic methods as well as the combination of both have been proposed to obtain abundance estimates. For instance, the adoption of Braun-Blanquet (1979) methodology for marine assemblages characterization (Cebrian & Ballesteros, 2004). Through these assessments besides composition data, the abundance estimates of species found in the considered categories would provide insights in the ecological/conservation status of assemblages. For instance, the presence of invasive species (either alien or not normally occurring in the habitat) are often considered very good indicators of poor conservation status.

[2] Proposal of standard methods for inventorying and monitoring coralligenous and rhodoliths populations UNEP-MAP-RAC/SPA (2011)

14. For maërl beds assemblages the same approach could be addressed although the current knowledge need to be improved to better define the categories and composition lists. In maërl beds, description is also possible naming the main maërl species and erect algae, as well as the main macroinvertebrates.

II. Data collection and inventories

II.1. Specific inventories

15. As mentioned the coralligenous habitat includes several assemblages due to its great heterogeneity. There is a small scale heterogeneity in environmental factors throughout the coralligenous outcrops that determine different micro-habitats containing different species. In the surface of coralligenous outcrops, coralline algae usually dominate, together with a variable amount of erect algae and of suspension-feeders. Holes and cavities within the coralligenous structure sustain complex communities without algae and dominated by suspension-feeders. Small crevices and interstices are inhabited by a diverse endofauna, while many vagile species swarm everywhere, thriving also in the small patches of sediment retained by the framework. Large fishes (e.g. *Epinephelus marginatus*, *Scorpaena scrofa*, *Phycis phycis*) and decapods (e.g. *Palinurus elephas*, *Homarus gammarus*) dwell in the coralligenous assemblages. One of the consequences of this great environmental heterogeneity is the presence of a high biodiversity and a wide array of organisms in each coralligenous outcrops.

16. Maërl beds are considerably less complex than coralligenous outcrops although they have some epiflora and epifauna that are more related to plants and animals usually found in rocky substrata, but also they harbour typically invertebrates from sedimentary bottoms.

17. A considerable amount of research has been done on the biodiversity hosted by coralligenous outcrops. Ballesteros (2006) estimates a preliminary account of up to 1666 species at the scale of the Mediterranean Sea. However these estimates are far from providing us a general view of biodiversity dwelling in the coralligenous assemblages. There are at least two levels of information which should be considered i) in fine detailed taxonomic studies specially in less studied groups and ii) comprehensive biodiversity surveys in targeted geographical areas. This information would be complemented by the determination of typical/indicator species of coralligenous in different areas/regions across the Mediterranean (see Point 1.3. Composition).

18. Overall with this information we could improve the estimates on the total number of species associated to the coralligenous and analyze geographical variability biodiversity patterns considering different spatial scales. The same approach should be adopted for maërl beds.

19. Methods. For data collection several methodologies have been used in sampling rocky benthic systems and maërl beds (e.g. Bianchi *et al.*, 2004, Kipson et al. 2011, Cechi et al. 2010, Gatti et al. 2015) and all of them present advantages and disadvantages. Moreover, suitability of each sampling method depends on the purposes of the study and on the taxonomic group considered.

20. As no sampling methodology can be universally applied, a general recommendation when making the assessments on species composition is to take into account the following considerations:

    - Use quantitative or semi-quantitative surveys instead of qualitative surveys wherever possible.
    - Clearly state the sampling and quantification methodology, including the period of the year, in order that it could be repeated in the future by independent teams for further comparison of data.
    - Samples have to be geographically positioned in the most accurate way.
    - Sampling has to be representative. Therefore, sampling areas should be larger than minimal sampling areas. It has to be noted that different taxonomic groups must be sampled using completely different representative areas.
    - Use photographic surveys to help in the identification of species

II.2. Sites of particular interest

21. Since the coralligenous and maërl assemblage in general thrive in deep waters, it is difficult to have an appropriate coverage of all the entire distribution range of the assemblage. Thus, it is recommended that inventories and monitoring be performed in selected sites of particular interest. The sites selection should be based in the most accurate previous information on the distribution, extension and ecological features and conservation status of coralligenous and maërl assemblages.

22. Amongst the criteria to be used in this selection, it is recommended the following ones:
    - Existence of previous information on coralligenous assemblages or maërl beds at the site or, if there is no available information at all, sea bottom geomorphological features suitable for the development of coralligenous frameworks and/or rhodolits.
    - Representatively of the coralligenous assemblages/maërl beds at a wide geographical area, whenever it is possible, according to present knowledge.
    - Existence of control and/or management of anthropic activities at the site. In this sense, marine protected areas are suitable places to be selected.
    - Especially healthy coralligenous and maërl assemblages are worth to be selected in order to assess the reference conditions.
    - Coralligenous communities and maërl beds under the effects of direct or indirect anthropogenic disturbances are worth to be selected in order to assess the impact conditions.

III. Monitoring activities

23. Even if coralligenous/maërl assemblages are characterized by very slow dynamics (Garrabou *et al.*, 2002, Teixidó et al. 2011), at least in the absence of punctual catastrophic disturbances (Teixidó et al. 2013), develop monitoring activities is of great interest to track their conservation status and detect changes associated to press and punctual human related disturbances as well as due to natural processes.

24. Monitoring is necessary to understand the processes behind long-term dynamics in the assemblages and is a central element for the implementation and evaluation of efficient management plans. Besides the monitoring activities on coralligenous assemblages are required for the implementation of European Marine Strategy Framework Directive (MSFD 2008/56/EC) and the Convention of Barcelona Decision[3] (see Legislation and regulation section) seeking to maintain the Good Environmental Status of assemblages.

III.1.Types of monitoring

25. The basic scheme of surveillance includes periodic monitoring of reference parameters (indicators) informing about the conservation status of coralligenous / maërl assemblages. The monitoring should be designed to be as simple as possible. Neither standard methods have been proposed nor environmental or ecological quality indexes have been established yet for the coralligenous assemblages.

26. Due the heterogeneity and habitat complexity monitoring should be conducted by a combination of methods to gather habitat, species and degree of impacts data.

27. Monitoring parameters should provide information on:

    Structural and functional parameters of assemblages:

    - Species/Categories composition/abundance (semi- or quantitative data)
    - Indicators on the degree of complexity of coralligenous habitats
    - Indicators on coralligenous functioning: bioeroders and bioconstructors
    - Qualitative, semi- and quantitative indicators on the impacts of different disturbances on coralligenous communities (e.g. presence of fishing nets, invasive species, high diving pressure)

    Environmental parameters
    -Temperature, sedimentation

[3] Decision IG.21/3 on the Ecosystems Approach including adopting definitions of Good Environmental Status (GES) and targets

III.2. Monitoring methods

III.2.1. General Considerations for sampling strategies for monitoring schemes

28. Bearing in mind the depth distribution of coralligenous / maerl assemblages monitoring methods have to be adapted to limited bottom working time by scuba divers (due to long decompression times and limitation of diver performance in deep waters; Tetzaff & Thorsen, 2005; Germonpre, 2006) and the limitation of the use of Remote Operate Vehicles (ROVs) beyond the operational depth of scuba divers (0-40m).

III.2.2. Spatial scales.

29. The high scale heterogeneity of coralligenous outcrops which implies a large sampling area to be representative (Ballesteros, 2006). At present, some studies have determined the minimum sampling areas in some assemblages (Kipson et al. 2011), similar approaches should be carried out in other coralligenous morpho-types. In general, in order to gather relevant data on the different indicators in each monitoring site the total sampling area (including different replication strategies) should cover about 5 to 30 m^2 (Deter et al. 2012, Garrabou et al. 2014, Gatti et al. 2015).

30. At each site, determine a specific depth range were the monitoring will be carried out (e.g. 30-35 m), in order to avoid the potential effect of depth in the outcome of the surveys. Within the depth range selected, in order to limit the effects of local heterogeneity on the outcome of the surveys, determine when possible, with the help of remarkable seascape marks, the specific monitoring area (e.g. it should be an area of several 100 m^2) of each sampling site. Eventually some marks can be fixed to help the sample in the same monitoring area. Finally, in each targeted geographic areas several sites should be monitored in order to better infer the conservation trends of assemblages.

31. When selecting monitoring sites one should keep in mind the existence of previous information on the extension and ecological quality of the coralligenous habitat. During selection process, it is recommended to consider the following questions:
    - Is there previous information available on coralligenous assemblages at the site or, if there is no available information at all, are the sea bottom geomorphological features suitable for the development of coralligenous frameworks?
    - According to the present knowledge, are considered coralligenous assemblages representative for a wider geographical area?
    - Are considered coralligenous assemblages especially healthy to be able to serve as reference points?
    - Are considered coralligenous assemblages under some clearly recognizable direct or indirect anthropogenic disturbance that would allow the assessment of the impact of these disturbances?

III.2.3.Temporal scales.

32. The low dynamic of coralligenous assemblages (Garrabou *et al.*, 2002, Casas et al. 2015) allows to set the sampling periodicity between 3-5 years for monitoring purposes. Regarding the period of monitoring, the ideal period is late summer (late August to early October). At that time water transparency and temperature allow better performances on data gathering and photosampling. In addition, if any mass mortality occurred during summer it can be observed in this period.

III.2.4. Sampling techniques

33. During the last years different approaches have been adopted for the assessment of conservation status of coralligenous assemblages using visual and/or photographic surveys (e.g. Cormaci *et al.*, 2004, Kipson et al. 2011, Deter et al. 2012, Garrabou et al. 2014, Gatti et al. 2015).The sampling approaches developed are based in non-destructive methods aiming to furnish rapid quantitative and semi-quantitative assessments of different parameters.

34. The basic parameters assessed by photographic sampling and visual census are abundance (e.g. coverage, density) of species found in the assemblages and estimations on the degree of impact of different key

processes (e.g. mortality events, bioerosion, fishing) related with the conservation of coralligenous assemblages.

35. Monitoring of environmental parameters is also needed if we want to relate changes in the coralligenous/maërl assemblages with disturbances related to hydrographic conditions. The most important variables to be monitored are: water temperature, sedimentation rates, nutrient concentration in seawater, particulate organic matter and water transparency.

36. Different initiatives (this Action Plan and EU directives) are focused in the development of indicators about the conservation and good environmental status of coralligenous. Through the monitoring activities presented we could obtain useful indicators (See Annex). These indicators are intended to inform decision makers and stakeholders and to support conservation and management planning (including MPAs network design) to guarantee the conservation of the coralligenous habitat.

37. Standardized protocols for the characterization of coralligenous/maërl assemblages needs to be developed. The main goal of this Action would be to do a comparative evaluation of the tools and sampling designs to be applied for the characterization of coralligenous habitats (e.g. in terms of species diversity (α, β, ϒ), structural complexity and main ecological processes) and to assess the level of impact of human pressures.

38. Indices and/or intercalibration initiatives to determine conservation environmental status of coralligenous should be developed to analyze the available indices developed to determine the Good Environmental Status of coralligenous to provide a common framework to compare the status of coralligenous across the Mediterranean.

IV. Research activities

IV.1.Taxonomy

39. Coralligenous/maërl assemblages probably are two of the most important hot-spots of species diversity in the Mediterranean, together with *Posidonia oceanica* meadows (Ballesteros, 2006; BIOMAERL team, 2003). In comparison to the large amount of literature devoted to the study of *Posidonia oceanica* meadows, studies devoted to strengthen the knowledge of coralligenous/maërl biodiversity are scarce. Therefore, due to the rich fauna, high heterogeneity at all scales, and complex structure of coralligenous/maërl assemblages, together with the paucity of studies dealing with coralligenous/maërl biodiversity, it can be assumed that at least coralligenous assemblages harbour more species than any other Mediterranean community. The check-list proposed in the second chapter of this Action plan should cover all the species found to date in coralligenous/maërl communities. However research in taxonomy is also needed as a large amount of taxonomic groups absolutely lack not only of a comprehensive study but almost any study dealing with species which can be found in coralligenous outcrops or maërl beds. The use of genetic tools can help in resolving taxonomic “problems” and discovering cryptic species (e.g. Dailianis et al. 2014).

40. Taking into account the current knowledge of biodiversity in coralligenous/maërl communities (Ballesteros, 2006), the following taxonomic groups need an important investment in research:

- Copepods
- Cumaceans
- Isopods
- Molluscs
- Mysids
- Nematods
- Nemerteans
- Ostracods
- Phyllocarids
- Polychaeta
- Pycnogonids
- Tanaidaceans

41. Further research in other groups is also acknowledged, as it will surely provide new reports of species for coralligenous outcrops and maërl beds.

IV.2. Long term evolution

42. To understand long-term dynamics of coralligenous assemblages in some selected areas sentinel/reference sites should be setup. Processes taking place in coralligenous communities in absence of disturbances usually display slow dynamics – i.e. decades – (Garrabou *et al.*,2002). Population dynamics of outstanding and key species show low growth rates and low population dynamics (e.g. Coma et al. 1998, Teixidó et al. 2011). Therefore, even if some of the patterns and processes that have been described so far occur in short time periods (e.g. mortality events; Cerrano *et al.*, 2000; Garrabou *et al.*, 2009), evolution of coralligenous can only be understood from a long-term perspective. Maërl beds are even less known as there are no comprehensive revisions in this subject regarding Mediterranean rhodolits.

43. Sentinel/reference sites are recommended to be visited once a year to obtain a robust temporal series. Even if seasonality in coralligenous/maërl communities is not as important as it is in shallower environments (Ballesteros, 2006, Garrabou et al. 2002), the monitoring is recommended to be always performed at the same period of the year in order to facilitate comparisons between years and sites.

44. These sites should be selected according to (1) their representativeness at a large geographical scale, (2) their accessibility and (3) the logistical facilities that may contribute to guarantee and facilitate the monitoring operations. We recommend the setup of sentinel/reference sites in fully protected zones within Marine Protected Areas. MPAs offer excellent facilities for long-term studies and are optimum conditions to approach to the "pristine" functioning of coralligenous assemblages. This precious information would serve as reference for guiding the adoption of conservation and management goals at different international and national levels.

IV.3. Functioning

45. Special care is to be taken for the study of the functioning of particular associations and species. Specifically, long-lived plants and animals that usually are the engineering species of the coralligenous or the most abundant calcareous algae in maërl beds, need a detailed knowledge of their growth, demographic patterns, vulnerability to disturbances and recovery capacities.

46. Research actions to fill the gaps of current knowledge should focus on (a) Bioconcretion dynamics (building and erosion processes); (b) Population dynamics of typical/indicator species; (c) Establish response of key/typical species to different stressors

V. Conservation activities

V.1. Major Threats

47. Major threats affecting coralligenous/maërl communities roughly coincide with threats affecting Mediterranean marine biodiversity and are listed in the Strategic Action Program for the Conservation of Biological Diversity (SAP BIO). However, due to its special habitat and features, not all the threats listed in the SAP BIO affect coralligenous/maërl communities, but some of them are specially relevant. It follows a brief description of the main threats.

V.1.1.Trawling

48. Trawling is probably the most destructive impact currently affecting coralligenous communities. Trawling is also completely destructive in maërl beds, being the main cause of maërl disappearance in large Mediterranean areas.The action of trawling gear over coralligenous/maërl assemblages leads to the

death of most engineering, dominant and builder species, completely changing the environmental conditions of the coralligenous microhabitats and from the maërl environment. As most of these species are particularly long-lived, have low recruitment and complex demographic patterns, destruction of the coralligenous/maërl structure is critical as their recovery will probably take several decades or even centuries.Trawling has also a great impact on target species that, although not as vulnerable as most suspension feeders, they also suffer from this indiscriminate method of fishing.

49. Finally, even the performance of trawling close to coralligenous outcrops or maërl beds affects negatively to algal growth and suspension-feeding due to an increase in turbidity and sedimentation.

V.1.2.Artisanal and recreational fishing

50. Both traditional and recreational fishing also have an effect on coralligenous communities, although they mainly affect the target species. Fishing leads to a significant decrease in mean specific number of fish species, producing changes in the community composition. Certain fishes, mainly elasmobranchs, are severely decimated by artisanal fishing practices when fishing pressure is outstanding. This is the case, for example, of several small sharks such as *Scyliorhinus stellaris*, *Mustelus* spp. or *Squalus* spp. In several places, other species such as groupers and lobsters (e.g. *Epinephelus marginatus* and *Palinurus elephas*) need the implementation of adequate fishery management. Besides, fishing activities can degrade habitat complexity due the breakage and mortality of fragile macrobenthic species during contact with fishing lines and nets (Bavestrello et al. 2000). The consequent erosion of complexity results from the reduction in the abundance and/or size of large gorgonian and other erect species (e.g. *Axinella* spp., *Hornera frondiculata*) (Tunesi *et al.*, 1991). The reduction of complexity could infer further biodiversity loss, however the extent of this impact and the associated mechanisms are still poorly understood (Cerrano et al. 2010).

51. Special care has to be taken with the commercial exploitation of red coral (*Corallium rubrum*), whose stocks have strongly declined in most areas. Adequate management of this extremely valuable and long-lived species is necessary.

V.1.3.Anchoring

52. Anchoring has a very severe impact in coralligenous concretions, as most of the engineering organisms are very fragile and are easily detached or broken by anchors and chains. Coralligenous concretions of frequently visited sites by recreational fishing or diving activities are degraded by the destructive potential of anchors.

V.1.4. Invasive species

53. Currently, at least three algal species are threatening coralligenous/maërl communities in the Western Mediterranean: *Womersleyella setacea*, *Acrothamnion preissii*, *Caulerpa racemosa v. cylindracea and Caulerpa taxifolia* (e.g. Cebrian et al. 2012, De Caralt & Cebrian 2013, Cebrian & Rodríguez-Prieto 2012). All of them are only invasive in relatively shallow water coralligenous outcrops and maërl beds (until 60 m), where irradiance levels are sufficient to permit their growth. However, they are especially dangerous, because they completely cover the basal stratum of encrusting corallines and increase sedimentation rates which lead to a total shut down of coralligenous growth or the survival of rhodolits. Most studies have been carried in the Western Mediterranean. There is an absolute lack of knowledge on the effects that lessepsian species have on coralligenous/maërl communities in the Eastern Mediterranean.

V.1.5. Global warming

54. Anomalous high water temperatures were concomitant with large scale mortalities of several suspension feeders (mainly sponges and anthozoans) growing in coralligenous assemblages (Cerrano *et al.*, 2000; Garrabou et al. 2009). Thus, it is expected that under the current trend of global warming (Somot et al. 2008), coralligenous assemblages will be affected by new mortality events during next decades specially in areas where coralligenous assemblages are situated above the summer level of the thermocline.

V.1.6.Waste water discharges

55. Waste waters profoundly affect the structure of coralligenous communities by inhibiting coralline algal growth, increasing bioerosion rates, decreasing species richness and densities of the largest individuals of the epifauna, eliminating some taxonomical groups and increasing the abundance of highly tolerant species (Hong, 1980, 1982; Cormaci *et al.*, 1985; Ballesteros, 2006). Although no information is available on the impact of eutrophication in Mediterranean maërl beds, the effects must be similar to those reported for coralligenous concretions.

V.1.7.Aquaculture

56. Although there are no studies on the impact of aquaculture facilities situated over or at the proximity of coralligenous outcrops, nor maërl beds, their effects should match those produced by waste water dumping.

V.1.8. Changes in land use and coastal infrastructure construction and urbanization

57. Most anthropogenic changes in coastal areas or at their vicinity involve an increase in water turbidity and/or sediment removal that affect coralligenous/maërl communities.

V.1.9. Recreational activities (excluding fishing)

58. Uncontrolled or over-frequentation of divers in coralligenous communities has been described to produce an important effect over certain large or fragile suspension feeders inhabiting coralligenous communities (Sala *et al.*, 1996; Garrabou *et al.*, 1998; Coma *et al.*, 2004; Linares et al. 2012).

V.1.10. Mucilaginous and filamentous algal aggregates

59. Blooms of mucilaginous and filamentous algal aggregates can cause severe damage over erect suspension feeders (mainly gorgonians). These blooms are still not well understood but they are apparently caused by eutrophication (Giuliani et al. 2005, Danovaro et al. 2009).

V.2. Legislation and regulations

60. Coralligenous/maërl assemblages should be granted legal protection at the same level as *Posidonia oceanica* meadows. A first step would be the inclusion of coralligenous concretions and maërl beds as a priority natural habitat type in the EU Habitats Directive (92/43/EEC), which would enable EEC countries to undertake surveillance of the conservation status of coralligenous/maërl assemblages and also to set an ecological network of areas of conservation (LICs/ZECs) hosting coralligenous/maërl assemblages, which would ensure their conservation or restoration at a favorable conservation status. Although *Phymatolithon calcareum* and *Lithothamnion corallioides* are present in the Annex V of the Habitats Directive and as such they should be provided by management measures in case of exploitation (which is never the case in the Mediterranean), there is no specific protection for maërl beds. Similar actions should be encouraged in non-EEC countries through the existing tools of the Barcelona Convention.

61. Regarding again European countries, recently (21 December 2006), it was published a Council Regulation (EC) No 1967/2006 concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea, amending Regulation (EEC) No 2847/93 and repealing Regulation (EC) No 1626/94 which states that “Fishing trawl nets, dredges, shore seines or similar nets above coralligenous habitats and maërl beds shall be prohibited” (Article 4.2) and that this prohibition “shall apply to all Natura 2000 sites, all special protected areas and all specially protected areas of Mediterranean interest (SPAMI) which have been designated for the purpose of the conservation of these habitats under either Directive 92/43/EEC or Decision 1999/800/EEC” (Article 4.4).

62. In 2008 the European Union adopted the Marine Strategy Framework Directive (MSFD 2008/56/EC) which requires to maintain European marine waters in “Good Environmental Status” (GES). The MSFD included 11 descriptors for the assessment of GES among them the Sea-floor Integrity is defined as “Sea-floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected.” (Rice et al. 2012). This descriptor directly concerns biogenic structures such as the Mediterranean coralligenous and different initiatives are

underway to determine the GES of coralligenous habitats (e.g. Gatti et al. 2015). The monitoring of different indicators (such as those indicated in this document and other proposed by other authors) should allow determining reference conditions at regional scales and the proposal of a quantitative index to evaluate the GES in each area. The final aim of MSFD is to guide management and conservation actions for maintaining and when necessary recover the good environmental of waters.

63. In line with the MSFD, the contracting parties to the Barcelona Convention set targets for achieving GES of the Mediterranean Sea and its coastal zone by 2020. In achieving these targets it has been recognized the importance to apply the ecosystem approach (EcAp) to the management of human activities that may affect the Mediterranean marine and coastal environment for the promotion of sustainable development (UEP/MAP 2007). In addition, through Decision IG 21/3 (the so-called "COP 18 EcAp Decision") the contracting Parties agreed to design an Integrated Monitoring and Assessment Program for the next meeting of the contracting parties (COP19) and mandated the Secretariat to carry out an assessment of the state of the Mediterranean environment in 2017 which necessarily will include the coralligenous/maërl habitats (UNEP/MAP, 2013).

V.3. Creation of Marine Protected Areas

64. Within the Convention on Biological Diversity (CBD) countries have committed to protect by 2020 "10% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and the effective area-based conservation measures" (Target 11 of the Aichi Strategic Plan for Biodiversity 2020) and the Roadmap for a comprehensive coherent network of well managed MPAs to achieve Aichi Target 11 in the Mediterranean. Overall, only about 1% of Mediterranean coastal waters susceptible to harbor coralligenous/maërl assemblages are protected.

65. Most present Mediterranean MPAs are devoted to protect *Posidonia oceanica* meadows and other shallow water assemblages, in such a way that the percentage of coralligenous/maërl habitat currently protected in the Mediterranean is extremely low. Thus, it is necessary to ptrotect representative coralligenous/maërl assemblages by applying the protection and management measures recommended by Articles 6 and 7 of the SPA/BD protocol. In fact, Marine Protected Areass (MPAs) have to be established taking into account the seascape diversity and trying to include places with several relevant assemblages, as has been already applied in the creation and zonation of some MPAs (Villa *et al.*, 2002; Di Nora *et al.*, 2007).

66. Countries have to identify and cartography as soon as possible sea bottoms covered by coralligenous outcrops and maërl beds in order to design a network of MPAs that enables the protection of coralligenous/maërl assemblages.

67. Those Mediterranean MPAs, which contain coralligenous/maërl assemblages and for which management and monitoring plans have not yet been developed and implemented, must develop and implement such plans as soon as possible.

V.4. National plans

68. To ensure more efficiency in the measures envisaged in the implementation of this Action Plan, Mediterranean countries are invited to establish national plans for the conservation of Coralligenous and other calcareous bio-concretions. Each national plan should take into account the concerned country's, or even areas', specific features. It must suggest appropriate legislative measures, particularly for the environmental impact assessment of coastal infrastructure (building works, pipelines out to sea, and deposits of material from dredging) and to control activities which could affect coralligenous/maërl assemblages. The national plan shall be based on the available scientific data and will include programmes for (i) collection and regular updating of data, (ii) training and refresher courses for specialists, (iii) awareness-raising and education for the general public, actors and decision-makers and (iv) the conservation of coralligenous/maërl assemblages of importance for the Mediterranean marine environment. The national plans must be brought to the attention of all concerned actors and, when possible, coordinated with the relevant national plans (e.g. emergency plan to deal with pollution).

VI. Coordination of this Action plan with other tools and initiatives

69. The Standard Data Form (SDF), developed by RAC/SPA, can be used to identify potentially good sites for the establishment of MPAs devoted to protect coralligenous/maërl assemblages. Besides the analysis of current data on the distribution of coralligenous assemblages along with information derived from distribution modelling tools can help guiding cost-effective future surveys and monitoring efforts towards the development of basin-wide marine protected areas network for coralligenous/maërl assemblages (Martin et al. 2014).

70. However the SDF is not appropriate to be used in the monitoring of coralligenous/maërl assemblages since it has been designed for the inventory of sites and habitats but not for an accurate assessment of multi-species population densities and their evolution. Annex B (habitat types) from the SDF should be slightly modified in the point IV.3.1 (Coralligenous biocenosis), according to current knowledge. Species appearing in Annex C should be slightly enlarged in order to include several engineering coralligenous species according to the adopted criteria for amendments of the Annexes (II & III) of the Protocol SPA-BD.

71. MPAs classified as SPAMIs and containing coralligenous/maërl assemblages inside their protected areas should develop management and protection plans to ensure their conservation.

VII. REGIONAL COORDINATION STRUCTURE

72. Regional coordination of the implementing of the present Action Plan will be guaranteed by the Mediterranean Action Plan's (MAP) secretariat through the Regional Activity Centre for Specially Protected Areas. The main functions of the coordinating structure shall consist in:
    - collecting, validating and circulating data at Mediterranean level;
    - promoting the drawing up of inventories of species, coralligenous/maërl assemblages of importance for the Mediterranean marine environment;
    - promoting trans-boundary cooperation;
    - promoting and supporting the setting up of coralligenous/maërl assemblages monitoring networks;
    - preparation of reports on progress in the implementation of the Action Plan, to be submitted to the meeting of national focal points for SPAs and to meetings of the Contracting Parties;
    - organizing meetings of experts on specific subjects relating to coralligenous/maërl assemblages and training sessions.

73. Complementary work done by other international organizations, and aiming at the same objectives, shall be encouraged, promoting coordination and avoiding possible duplication of efforts.

VIII. PARTICIPATION IN THE IMPLEMENTATION

74. Implementing the present Action Plan is the province of the national authorities of the Contracting Parties. The concerned international organizations and/or NGOs, laboratories and any organization or body are invited to join in the work necessary for implementing the present Action Plan. At their ordinary meetings, the Contracting Parties may, at the suggestion of the meeting of National Focal Points for SPAs, grant the status of "Action Plan Associate" to any organization or laboratory which so requests and which carries out, or supports (financially or otherwise) the carrying out of concrete actions (conservation, research, etc.) likely to facilitate the implementation of the present Action Plan, taking into account the priorities contained therein.

75. The coordination structure shall set up a mechanism for regular dialogue between the participating organizations and, where necessary, organize meetings to this effect. Dialogue should be made mainly by mail, including E-mail.

ANNEX: IMPLEMENTATION TIMETABLE

Action	Deadline	to be implemented by
1. Build and publish the database of scientists and research institutions working on the coralligenous assemblages and maërl beds.	2016	RAC/SPA
2.Guidelines for the assessment of environmental impact on coralligenous/maërl assemblages		
3. Development of Working Groups on coralligenous assemblages and maërl beds.	2016	RAC/SPA-Contracting Parties
4. Buid-up a coralligenous/maërl assemblages distribution on line database	2018	RAC/SPA-Contracting Parties
5. Improve habitat modeling methods could provide new predictive models on coralligenous distribution and guide cost-effective field surveys for data acquisition	2017	Contracting Parties
6. Characterization of coralligenous habitats at regional scale	2018	RAC/SPA-Contracting Parties
7. Build-up a Check-list / Reference species list for the coralligenous assemblages	2016	RAC/SPA
8. Development of standardized protocols for the characterization of coralligenous /maërl assemblages.	2017	RAC/SPA-Contracting Parties
9. Development of indices and/or intercalibration initiatives to determine conservation environmental status of coralligenous	2017	RAC/SPA-Contracting Parties
10. Set a network of sentinel sites on coralligenous across the Mediterranean	2020	RAC/SPA-Contracting Parties
11. Promote research programs on coralligenous assemblages and maerl beds	2016	Contracting Parties
12. Develop and implement legislation initiatives for the conservation of coralligenous assemblages	Ongoing	Contracting Parties
13. Coordinate the design of an Integrated Monitoring and Assessment Program for the assessment of the state coralligenous/maërl assemblages in view to be included the assessment of the state of the Mediterranean	2016	Contracting Parties
14. Promote the declaration of marine protected areas to preserve coralligenous assemblages in coastal and offshore areas	2018	RAC/SPA-Contracting Parties
15. Build-up a coordination platform on different initiatives devoted to the coralligenous/maërl assemblages	2017	RAC/SPA
16. Organize a Symposium on coralligenous assemblages and maërl beds every 3 years	2018	RAC/SPA
17. Preparation of a communication plan to raise the awareness on the importance of coralligenous assemblages and maërl beds for the conservation of Mediterranean biodiversity	2017	RAC/SPA

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Annex IX

Recommendations of the 1st Mediterranean Symposium on Dark Habitats

Recommendations of the 1st Mediterranean Symposium on Dark Habitats
Portoroz, Slovenia, 31 October 2014

The first 2 sessions were devoted to deep habitats, largely focussing on canyons, rocky banks and escarpments. A lot of attention was given to describing the spatial distribution of biodiversity mostly from the western Mediterranean basin. The data gathered has already helped some countries to revise their typology of assemblages. It was clear to all that this initiative should be transferred to other Mediterranean countries, in agreement with international initiatives currently undertaken.

The main impact documented by participants was the accumulation of marine litter, most particularly lost fishing gear and plastics. The participation of stakeholders and decision-makers to deep exploration seems a good idea to increase awareness about the damage caused by such human activities. Outreach / educative actions targeted towards the general public and especially towards recreational and professional fishermen could enhance environmental awareness.

Many efforts were made to georeference data and feed interactive databases. This effort should be supported in the long term. Environmental (e.g. temperature, currents, etc.) data are missing from the depth range where most these studies were carried out (50-500 m). MPAs beyond national jurisdiction are still too few to ensure poorly resilient deep-sea communities can persist in the future.

The session on caves gathered contributions from different parts of the Med. Many efforts were made on gathering existing information on the distribution of caves, our degree of knowledge and how to evaluate the ecological quality status, through their functional components. It was stressed that they are a significant reservoir of biodiversity and that they too are poorly resilient. However, although within the reach of recreational divers, human impact on caves other than global warming and pollution is believed to still be marginal. Possible impacts would have to be evaluated. Meanwhile we need to improve our basic knowledge on connectivity among cave populations, their biodiversity and functioning of their communities.

Annex X

Draft Programme of work for Reference Lists of Habitat Types in the Mediterranean

Draft Programme of work for Reference Lists of Habitat Types in the Mediterranean

It is recommended that RAC/SPA direct its action over the coming two-year period towards the following activities:

- Evaluation of national inventories of natural sites of conservation interest;
- Further assistance to countries for the use of the SDF and to strengthen their capacity to map, monitor and assess the marine habitats status within the framework of EcAp;
- Updating of the reference list of marine and coastal natural habitat types;
- Ensure further harmonisation of the reference list of marine and coastal natural habitat types with other similar tools, such as the ones related to Natura 2000 and EUNIS;
- Further developing MedGIS and working in close collaboration with the Focal Points for SPAs to feed data into it and GIS-Based mapping of marine key habitats (*Posidonia* meadows and coralligenous) by 2017;
- Enhancing partnership with the actors in the region concerned by the collection and circulation of pertinent information for the conservation marine key habitats.

Annex XI

DRAFT UPDATE OF THE ACTION PLAN CONCERNING SPECIES INTRODUCTIONS AND INVASIVE SPECIES IN THE MEDITERRANEAN SEA

DRAFT UPDATE OF THE ACTION PLAN CONCERNING SPECIES INTRODUCTIONS AND INVASIVE SPECIES IN THE MEDITERRANEAN SEA

INTRODUCTION

1. In 1975, 16 Mediterranean countries and the European Community adopted the Mediterranean Action Plan (MAP), the first-ever Regional Seas Programme under UNEP's umbrella. In 1976 these Parties adopted the Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention). Seven Protocols addressing specific aspects of Mediterranean environmental conservation complete the MAP legal framework.

2. In 1995, the Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean (MAP Phase II) was adopted by the Contracting Parties to replace the Mediterranean Action Plan of 1975. At the same time, the Contracting Parties adopted an amended version of the Barcelona Convention of 1976, renamed Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean.

3. Currently, MAP has been adopted by 21 countries bordering the Mediterranean Sea, and the European Union. The 22 Contracting Parties to the Barcelona Convention give priority to the conservation of the marine environment and to the components of its biological diversity. This has been confirmed on several occasions, particularly by the adopting (Barcelona, 1995) of the new Protocol concerning specially protected areas and biological diversity in the Mediterranean (SPA Protocol) and of its Annexes.

4. The SPA Protocol invites the Contracting Parties to take "all appropriate measures to regulate the intentional or non-intentional introduction of non-indigenous or genetically modified species into the wild and prohibit those that may have harmful impacts on the ecosystems, habitats or species" (Article 13.1).

5. For established alien[4] species, the SPA Protocol stipulates that "the Parties shall endeavour to implement all possible measures to eradicate species that have already been introduced when, after scientific assessment, it appears that such species cause or are likely to cause damage to ecosystems, habitats or species" (Article 13.2).

6. The Convention on Biological Diversity calls on in its Article 8 (h) each Contracting Party, as far as possible and as appropriate "to prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species". In the tenth meeting of the Conference of the Parties, held from 18 to 29 October 2010, in Nagoya, Aichi Prefecture, Japan, a revised and updated Strategic Plan for Biodiversity, including the Aichi Biodiversity Targets, for the 2011-2020 period, was adopted. According to Aichi Target 9, "By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment."

7. Aichi Target 9 is reflected in Target 5 of the EU Biodiversity Strategy (European Commission COM/2011/244). Furthermore, the new EU Regulation (No 1143/2014) on the prevention and management of the introduction and spread of invasive alien species is a dedicated instrument to mitigate the impacts of biological invasions in Europe. The European Commission, European countries, and their relevant authorities will have, under the new EU legislative instrument, obligations and commitments in respect to invasive alien species (IAS). These include prioritising pathways for prevention, identifying

[4]Synonym of 'non-indigenous'. The term alien is adopted herein as it is the term currently mostly used by the scientific community and recent legislation (e.g. the new EU Regulation No 1143/2014 on the prevention and management of the introduction and spread of invasive alien species)

the most harmful species for responses (list of species of EU concern), enforcing effective early warning and rapid response mechanisms for the IAS of EU concern, eradicating such species at an early stage of invasion, and taking management measures for IAS that are widely spread. In addition, the EU Marine Strategy Framework Directive (2008/56/EC) recognises alien marine species as a major threat to European biodiversity and ecosystem health, requiring Member States to consider them when developing strategies so that all European Seas reach Good Environmental Status by 2020. The European Alien Species Information Network (EASIN)[5] was launched in 2012 by the European Commission to facilitate the exploration of existing alien species information and to assist the implementation of the new Regulation and the other EU policies on biological invasions.

8. The trend of new introductions of alien species in the Mediterranean has been increasing. About 1000 marine alien species have been reported in the Mediterranean Sea up to now, of which more than half are considered established[6]. Many of these species have become invasive with serious negative impacts on biodiversity, human health, and ecosystem services.

9. There are many routes and mechanisms by which new alien species arrive in the Mediterranean Sea. Identification and assessment of the pathways of introduction is essential for predicting future trends of new introductions, identifying management options to mitigate invasions and to prevent new introductions, and communicating related risks and costs to policy makers and high level administration. More than half of the marine alien species in the Mediterranean were probably unintentionally introduced through the Suez Canal. Shipping (by means of ballast waters and hull fouling) is the second most important pathway, followed by aquaculture and trade in live marine organisms (e.g. aquarium trade, fishing bait). The same vectors and some additional ones (e.g. fishing activities) may facilitate secondary introductions within and outside the Mediterranean.

10. In the Mediterranean Sea, despite the variability in monitoring and reporting effort among countries and the gaps in our knowledge of alien species distribution, there is an enormous amount of information scattered in various databases, institutional repositories, and the literature. By harmonizing and integrating information that has often been collected based on different protocols and is distributed in various sources, the needed knowledge basis to assess the distribution and status of marine alien species can be built.

11. Elaborating and implementing action plans to confront the threats to biological diversity is an effective way of guiding, coordinating and stepping up the efforts made by the Mediterranean countries to safeguard the region's natural heritage. The invasive alien species are seen as being among the main threats to marine biodiversity in the Mediterranean. The adopted Ecosystem Approach (EcAp)[7] to management of human activities with a view to conserve natural marine heritage and protecting vital ecosystem services recognises that to achieve good environmental status "non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystem". It is imperative to take immediate steps to prevent the introduction of alien species, control the spread of those already

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[5] http://easin.jrc.ec.europa.eu/

[6] Zenetos et al. (2012). Alien species in the Mediterranean Sea by 2012. A contribution to the application of European Union's Marine Strategy Framework Directive (MSFD). Part 2. Introduction trends and pathways. *Mediterranean Marine Science* 13(2): 328–352.

[7] The 15th Meeting of the Contracting Parties to the Barcelona Convention (COP15) decided (through Decision IG.17/5) to progressively apply the ecosystem approach (EcAp) to the management of human activities that may affect the Mediterranean marine and coastal environment for the promotion of sustainable development.
The 17th Meeting of the Contracting Parties to the Barcelona Convention (COP17) confirmed the importance given to the EcAp in the Mediterranean, and agreed (through Decision IG.20/4) on an overall vision and goals for EcAp, on 11 ecological objectives, operational objectives and indicators for the Mediterranean, adopted the timeline for implementing the ecosystem approach until 2019 and established a six-year cyclic review process of its implementation, with the next EcAp cycle to cover 2016-2021.
At the 18th Meeting of the Contracting Parties to the Barcelona Convention (COP18), targets for achieving Good Environmental Status of the Mediterranean Sea and its coastal zone by 2020 were adopted. In addition, through Decision IG. 21/3 (the so called "COP18 EcAp Decision‖), the Contracting Parties agreed to design an Integrated Monitoring and Assessment Programme by the next Meeting of the Contracting Parties (COP19), and mandated the Secretariat to carry out an assessment of the state of the Mediterranean environment in 2017.

introduced and endeavour to mitigate the damage they cause to the marine ecosystem. The present Action Plan is being elaborated on the basis of the existing regional and international policies on invasive species data available; it will be adapted and updated, if necessary, to reflect the latest policies and new data available.

12. The actions advocated by the present Action Plan are to be carried out over a five year period, starting from when the Action Plan is adopted by the Contracting Parties. At the end of this period, RAC/SPA will prepare a report on the progress so far made in implementing the advocated actions, and will submit this to the National Focal Points for SPAs, who will make follow-up suggestions to the Parties.

13. Considering the world-wide scope of the issue of alien species introduction, it is important that the implementation of the present Action Plan be done in consultation and collaboration with the initiatives undertaken in this field in other regions and/or by other international organisations.

A. OBJECTIVES OF THE ACTION PLAN

14. The main objective of the present Action Plan is to promote the development of coordinated efforts and management measures throughout the Mediterranean region in order to prevent, monitor, and control marine biological invasions and their impacts on biodiversity, human health, and ecosystem services, particularly by:

1. strengthening the capacity of the Mediterranean countries to deal with the issue of alien species, within the framework of the EcAp;
2. supporting a regional information network for the efficient exploitation of alien species data and to support the regional policies on biological invasions;
3. furhter developing MAMIAS, an online platform for the collection, exploitation, and dissemination of information on marine biological invasions in the Mediterranean Sea to support relevant regional and international policies;
4. strengthening the institutional and legislative frameworks at the level of the countries of the region;
5. conducting baseline studies and establishing monitoring programmes, within the framework of the EcAp Integrated Monitoring and Assessment Programme, to collect reliable and pertinent scientific data that can be used for decision-making where necessary;
6. setting up mechanisms for cooperation and the exchange of information among the Mediterranean countries;
7. Elaborating guidelines and any other technical documentation.

B. PRIORITIES

B.1 At national level

15. Considering the lack of the data and knowledge necessary for impact and risk assessments, horizon scanning, and the implementation of management actions for prevention, control and eradication, priority at national level should be given to:

1. encouraging all necessary actions (e.g. research work, data collection, monitoring, national impact assessments, horizon scanning etc.) aimed at improving the available knowledge;
2. conducting baseline studies and establishing monitoring programmes to collect reliable and pertinent data on the distribution of alien species in the territorial waters;
3. coordinating the actions that are necessary for the regular provision of essential information for the national and Mediterranean-wide reference lists of alien species;

4. supporting, through the provision of essential information, the 'Marine Mediterranean Invasive Alien Species' (MAMIAS) database and online platform, which will include Mediterranean-wide national lists of alien species, including information on their taxonomic classification, ecology, biology, habitats, and impacts on biodiversity, human health, and ecosystem services;
5. encouraging the implementation of scientifically-backed regionally-harmonised measures of prevention and control in particular for the high risk pathways of Non Indigenous Species (NIS);
6. developing training and raising awareness programmes on risks, legal issues, best practices, and management actions for prevention and mitigation of impacts.

B.2 At regional level

16. Considering the breadth and complexity of the issue of alien species introduction, the large amount of relevant information that remains scattered in various databases and repositories, and the need for harmonization and integration of alien-species data, priority at regional level should be given to:

1. coordinating, supporting, and updating the 'Marine Mediterranean Invasive Alien Species' (MAMIAS) database and online platform;
2. creating an active network of partners within the framework of MAMIAS for the continuous updating of the database and the early warning in case of new records of invasive species;
3. linking MAMIAS to other international networks, such as the European Alien Species Information Network (EASIN), increasing its visibility and use for the support of international policies on the management of alien invasive species;
4. elaborating and adopting at regional level guidelines intended to assist the relevant national authorities;
5. assisting national authorities to organise training on taxonomical issues, identification of target species, monitoring methods and reporting, and management practices;
6. coordinating the actions taken by neighbouring Parties to prevent and control the introduction of alien species;
7. supporting cooperation at international level.

C. ACTIONS REQUIRED TO ATTAIN THE OBJECTIVES OF THE ACTION PLAN

C.1 At national level

C.1.1. Data collection

17. The Contracting Parties are invited to assess the situation as regards the introduction of marine species and compile the available information to prepare updated national reports. The need to address the operational objectives 2.1, 2.2 and 2.3 for the implementation of the agreed EcAp should be reflected in the national reports. To this end, Contracting Parties will be assisted by RAC/SPA, if necessary. The national reports will particularly deal with:

- inventorying the alien marine species reported in the national territory, and providing the relevant documentation available;
- trends in abundance, temporal occurrence and spatial distribution in the wild of alien species, particularly invasive alien species, notably in risk areas, in relation to the main vectors and pathways of spreading of such species;
- ratio between invasive alien species and native species in some well-studied taxonomic groups (e.g. fish, macroalgae, molluscs) that may provide a measure of change in species composition;
- impacts of alien species on biodiversity, human health, and ecosystem services at national level;
- steps taken at national level to prevent and control the introduction of marine species
- the national institutional framework that governs the controlling of species introduction
- horizon scanning to identify future threats from invasive species
- participation at pertinent international initiatives, including joining international agreements and bilateral cooperation.

18. The Parties are requested to design and implement programmes for data collection, monitoring and assessment, within the framework of the EcAp Integrated Monitoring and Assessment Programme[8], particularly of:

- the presence of alien marine species, the pathways of their introduction, and the state of their population trends, including those used in aquaculture;
- the ratio between alien and native species in some well-studied taxonomic groups (e.g. fish, macroalgae, molluscs) to provide a measure of change in species composition;
- the impact of alien species on biodiversity, human health and ecosystem services, including both negative and positive impacts.

C.1.2. Supporting MAMIAS

19. Considering the need of a comprehensive and continuously updated information system to support coordinated efforts and management measures throughout the Mediterranean region in order to prevent, control and monitor marine biological invasions and their impacts on biodiversity, human health and ecosystem services, the Parties are requested to conduct a baseline study, reporting in particular:

- an inventory of all alien species in their territorial waters;
- for each species: the year of first record, the pathway of introduction (together with the level of certainty in assessing the pathway: direct evidence, most likely, possible), and the state of the population;
- georeferenced records of alien species presence and the date of each record;
- studies on the impact of the alien species at national level;
- any relevant documentation.

The baseline study should be submitted to RAC/SPA to feed MAMIAS. Reporting should follow the forms provided by RAC/SPA.

20. The baseline study should be updated annually based on the outputs of the national monitoring programmes (paragraph 18) and any new information should be submitted to RAC/SPA and made available to MAMIAS.

C.1.3. Legislation

21. Those Contracting Parties which have not yet enacted national legislation for controlling the introduction of marine species must do so as quickly as possible. All the Contracting Parties are strongly recommended to take the necessary steps to express in their national laws the provisions of the pertinent

[8] UNEP(DEPI)/MED WG.411/3

international treaties, especially the IMO Convention on the management of ballast waters, and guidelines and codes adopted on the subject within the context of international organisations[9].

C.1.4. Institutional framework

22. A mechanism should be set up, if possible at the level of each country, to promote and coordinate the following actions:

- compiling an inventory of introduced species and assessing their pathways of introduction;
- cooperating with RAC/SPA and supporting regional initiatives, in particular supporting and updating MAMIAS;
- establishing a directory of relevant specialists and organisations;
- setting up a group of experts who will be responsible for assessing all relevant issues; regarding introduction, spatial distribution, pathways of introduction, and impacts of alien species, and analysing risks and possible consequences, in close consultation with the other Parties and relevant International Organisations
- developing relevant training programmes;
- strengthening and where necessary setting up systems to control the intentional import and export of alien marine species;
- developing and implementing risk-assessment techniques;
- promoting relevant scientific research;
- cooperating with the concerned authorities in neighbouring states regarding the detection of introduced species and risk assessment;
- participating in international initiatives on invasive species;
- promoting citizen science initiatives to support the monitoring of invasive species;
- developing programmes to raise the awareness of the general public and target groups, including decision-makers, concerning the risks associated with species introduction;

C.1.5. National Plans

23. To ensure more efficiency in the measures envisaged in the implementation of this Action Plan, Mediterranean countries are invited to establish National Plans to prevent the introduction of new alien marine species by controlling their pathways, and to mitigate their negative impact. Each National Plan, taking into account the concerned country's specific features, must suggest appropriate institutional and legislative measures. The National Plan shall be based on the available scientific data and will include programmes for (i) the collection and regular updating of data, especially for the support of EcAp (ii) the highest possible dissemination of data and relevant information, especially within the framework of MAMIAS (ii) training and refresher courses for specialists, (iii) awareness-raising and education for the general public, actors and decision-makers and (iv) coordination and collaboration with other states. The

[9]Many organisations have elaborated codes, guidelines or other tools providing technical and legal recommendations for the better control of species introductions and mitigation of their negative impacts. Those tools which are most pertinent for the Mediterranean region are:
- Guiding principles for the prevention, introduction and mitigation of impacts of alien species (elaborated within the framework of the Convention on Biological Diversity)
- Recommendation no. 57 on the Introduction of Organisms belonging to Non-Native Species into the Environment (adopted within the framework of the Bern Convention)
- The IUCN Guidelines for the prevention of biodiversity loss caused by alien invasive species
- The Code of Practice on the Introductions and Transfers of Marine Organisms (developed by the International Council for the Exploration of the Sea)
- Guidelines for preventing the introduction of unwanted aquatic organisms and pathogens from ships' ballast water and sediment discharges (adopted within the framework of the IMO)
- The precautionary approach concerning the introduction of species (developed by the FAO).

national plans must be brought to the attention of all concerned actors and, when possible, coordinated on a regional basis.

C.2 At regional level

C.2.1. Development of the MAMIAS platform

24. Considering that sufficient high quality information on alien species ecology, distribution, pathways of introduction, impacts, and effective management strategies is a prerequisite for the efficient prevention, early detection, rapid response, and management of biological invasions, a regional mechanism for collecting, harmonizing, and integrating information on alien species should be set up as part of the present Action Plan. The MAMIAS online platform will be at the core of this mechanism, and will be further developed to include:

- a comprehensive basin-wide database on all alien species with information on their taxonomic classification, establishment success, year of first introduction in the Mediterranean, years of first record in each Mediterranean country, pathways of both primary and secondary introductions, impacts on biodiversity, human health, and ecosystem services, links to factsheets and other databases with relevant information;
- for the most invasive and high-impact species, factsheets with details on their biology and ecology, diagnostic characters and field identification signs, native range, distribution maps in the Mediterranean and globally, history of its introduction, population trends, impacts on biodiversity, human health, and ecosystem services, relevant links, and existing management measures for control or eradication;
- a user-friendly web site with online tools and web services for searching the database and extracting data;
- online mapping tools providing distribution maps of alien species in the Mediterranean Sea and possibilities to extract spatial data;
- an early warning system to issue notifications to the Parties, when there is an early new detection of invasive and high-impact species;
- online tools to produce statistics and indicators, such as trends in new introductions by pathway and trends in spatial distribution, especially to support the application of EcAp; these tools should be capable to assist the estimation of the common indicator 6 of the EcAp Integrated Monitoring and Assessment Programme[10].

25. Considering that to effective support international and regional policies and scientific research on biological invasions, and to efficiently use the already accumulated knowledge, there is a need for standardization, harmonization and integration of existing information systems, it is recommended that RAC/SPA will establish collaborations and close links between MAMIAS and other international information systems and organizations. An indicative list of collaborators includes:

- EASIN (European Alien Species Information Network) which is the official platform of the European Commission aiming to facilitate the exploration of existing alien species information in Europe and to assist the implementation of the European policies on biological invasions;
- the GIASI Partnership Gateway, assisting partners of the CBD to implement Article 8(h) and Target 9 of the Aichi Biodiversity Targets;
- IUCN-ISSG (Invasive Species Specialist Group of the International Union for Conservation of Nature) aiming to reduce the threat to natural ecosystems and native species by increasing awareness of invasive alien species, and of ways to prevent, control or eradicate them;

[10]Trends in abundance, temporal occurrence and spatial distribution of non-indigenous species, particularly invasive, non-indigenous species, notably in risk areas (EO2, in relation to the main vectors and pathways of spreading of such species) [UNEP(DEPI)/MED WG.411/3]

- WORMS (World Register of Marine Species) and WRIMS (World Register of Introduced Marine Species), which provide an authoritative and comprehensive list of names of marine organisms and relevant taxonomic information.

C.2.2. Training

26. To support the implementation of the present Action Plan, a regional training session should be organised in collaboration with the concerned international organisations. In particular, it will deal with the main following themes:

- Methods and protocols for impact and risk assessments, and horizon scanning regarding new introductions of alien species;
- Management measures for prevention, control and eradication of invasive alien species
- Taxonomic issues and identification of alien species;
- Monitoring methods and protocols for marine alien species.

C.2.3. Public education and awareness

27. With a view to promoting the Mediterranean countries' national programmes for raising the awareness of the general public and target groups, including decision-makers, about the risks associated with introducing alien marine species into the Mediterranean and with bad practices that assist the secondary spread of already established alien species, it is recommended that RAC/SPA, in collaboration with the relevant national authorities and international organisations, prepare brochures, posters and other educational and awareness materials. These will be made available to the National Focal Points for SPAs, to be circulated in their respective countries.

D. REGIONAL COORDINATION

28. Regional coordination of the implementation of the present Action Plan will be guaranteed by the Mediterranean Action Plan's (MAP) Secretariat through the Regional Activity Centre for Specially Protected Areas. The main functions of the coordinating structure shall consist in:

- taking in hand the implementation of those actions required at regional level to attain the present Action Plan's objectives (Section C.2 above)
- insofar as its means permit, assisting the Contracting Parties in implementing the actions required at national level to attain the present Action Plan's objectives (Section C.1 above);
- regularly reporting to the National Focal Points for SPAs about the implementation of the present Action Plan, and preparing the report mentioned in paragraph 12 above;
- collaborating with the concerned organisations and endeavouring to ensure that the Mediterranean region is involved in the pertinent international and/or regional initiatives;
- promoting exchanges among Mediterranean specialists.

E. PARTICIPATION IN THE IMPLEMENTATION

29. Implementing the present Action Plan is the province of the national authorities of the Contracting Parties. The concerned international organisations and/or NGOs, laboratories and any organisation or body are invited to join in the work necessary for implementing the Action Plan. At their ordinary meetings, the Contracting Parties may, at the suggestion of the meeting of National Focal Points for SPAs, grant the status of "Action Plan Associate" to any organization or laboratory which so requests and which carries out, or supports (financially or otherwise) the carrying out of concrete actions (conservation, research, etc.) likely to facilitate the implementation of the present Action Plan, taking into account the priorities contained therein

In addition to collaborating and coordinating with the Secretariats of the relevant Conventions, RAC/SPA should invite IMO and FAO/GFCM to join and contribute to the implementation of the

present Action Plan. It will set up a mechanism for regular dialogue between the participating organisations and, where necessary, organise meetings to this effect.

ANNEX: IMPLEMENTATION TIMETABLE

Action	Deadline	Responsible
1. Preparation of national reports (paragraph 17)	2015	Contracting Parties
2. Set up a mechanism to promote and coordinate the actions listed in paragraph 22	2015	Contracting Parties
3. Launch MAMIAS (paragraph 24)	2015	RAC/SPA
4. Preparation of forms for reporting to MAMIAS (as provisioned in paragraph 19)	2015	RAC/SPA
5. Baseline study with information for MAMIAS (paragraph 19)	2016	Contracting Parties
6. Develop programmes for data collection and monitoring (paragraph 18)	2016	Contracting Parties
7. Launch the procedures for enacting or strengthening national legislation governing the control of alien species introduction (paragraph 21)	2016	Contracting Parties
8. Establish/update a directory of relevant specialists and organisations (paragraph 22)	2016	RAC/SPA, Contracting Parties
9. Develop programmes to raise the awareness of the general public and target groups, including decision-makers, concerning the risks associated with species introduction (paragraph 22)	2016	Contracting Parties
10. Develop online tools and web services for searching the database and extracting data (paragraph 24)	2016	RAC/SPA
11. Annual updates of national data for MAMIAS (paragraph 20)	2017-2019 (annually)	Contracting Parties
12. Develop and implement risk-assessment techniques (paragraph 22)	2017	Contracting Parties
13. Develop online mapping tools (paragraph 24)	2017	RAC/SPA
14. Organise the regional training session (paragraph 26)	2017	RAC/SPA
15. Elaborate the National Plans (paragraph 23)	2018	Contracting Parties
16. Develop an early warning system in the framework of MAMIAS (paragraph 24)	2018	RAC/SPA
17. Establish collaborations and links between MAMIAS and other international systems and organizations (paragraph 25)	2018	RAC/SPA

18. Preparation of material for public education and awareness (paragraph 27)	2019	RAC/SPA, Contracting Parties
19. Develop online tools in MAMIAS for statistics and indicators, especially to support EcAp (paragraph 24)	2019	RAC/SPA
20. Organise a symposium every 3 years	From 2015	RAC/SPA

Annex XII

Preliminary list of projects proposed by the Secretariat for addressing SAP BIO funding needs

Preliminary list of projects proposed by the Secretariat for addressing SAP BIO funding needs

1. Monitoring of biodiversity indicators in a Mediterranean sub region (Western, Central, Eastern or Adriatic), including climate change, and including in SPAMIs
2. Rehabilitation and valorisation of Mediterranean coastal wetlands for biodiversity conservation and the socio-economic benefit of local communities
3. Initiative to support the implementation of the Dark Habitat Action Plan
4. Pilot project to shape governance models in open-sea priority areas for conservation in the Mediterranean (Alboran and Adriatic)
5. Ecological Connectivity: a tool for maritime spatial planning in the Mediterranean
6. Supporting country actions for capacity building on MPAs management
7. Supporting Countries for valorisation of MPAs: a new approach for the conservation of the marine environment and the development of eco-tourism
8. Supporting South and East Mediterranean countries in the establishment and management of MPAs
9. Marine Alien species assessing program in South and Easter Mediterranean and the Adriatic Sea (support the implementation of the Action Plan concerning species introduction and invasive species in the Mediterranean Sea)
10. Conservation of the Mediterranean Monk Seal in the Central Mediterranean, including the Adriatic
11. Capacity Building and Institutional Strengthening Strategy for Marine Conservation

Annex XIII

Executive Summary of the Karaburun Sazan Marine Park proposed for inclusion in the List of Specially Protected Areas of Mediterranean Importance (SPAMI List)

Executive Summary of the Karaburun Sazan Marine Park proposed for inclusion in the List of Specially Protected Areas of Mediterranean Importance (SPAMI List)

During the biennial period 2013-2014 and prior to the Twelfth meeting of Focal Points for SPAs, only Albania has submitted to the RAC/SPA Secretariat a proposal for inclusion in the SPAMI List. It is the National Marine Park «KARABURUN SAZAN».

The executive summary of the Presentation report of the National Marine Park «KARABURUN SAZAN» proposed for inclusion in the SPAMI List is presented here after, whereas the full Presentation report is annexed in its original version (English).

Executive Summary (National Marine Park «KARABURUN SAZAN»)

The National Park of the marine natural ecosystem near Karaburuni Peninsula and Sazani Island has been proclaimed on 28 April 2010 by the Council of Ministers, upon the proposal of the Minister of Environment, Forestry and Water Administration. The total area of the Karaburun Sazan National Marine Park (NMP) is 12,570.82 ha, with a marine area near Karaburuni having 9,848.95 ha and a marine area near Sazani Island having 2,721.87 ha. The borders of the NMP have been defined by the above-mentioned Decision on Proclamation. The National Marine Park “Karaburun Sazan” is located in southern Albania, on the north and western shore of the Karaburun Peninsula and around the Sazani Island, at the southern end of the Adriatic and northern border of the Ionian Sea. Its territory is under the administration of Vlora municipality, part of the Vlora Region.

Karaburuni Peninsula is the most evident site of Mediterranean quality. The mediolittoral environment is characterized by coralligenous formations sometimes over a meter large built by the coralligenous alga *Lithophyllum lichenoides*, a protected species, which is exceptional geomorphologically, biologically and from a touristic point of view, as it may be extremely spectacular. The Island of Sazani (16 km long and 3-5 km wide), in front of Vlora and north of Karaburuni Peninsula, has an ellipsoid form oriented NNWSSE and culminates at 345 m with Gryka e Djallit hill.

The Karaburun-Sazan National Marine Park is designed to provide a pragmatic approach aiming at establishing equilibrium between sustainable economic development and natural resource conservation ensuring long term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to support coastal communities’ development. The main objectives of its designation are:

- To protect and maintain the biological diversity and other natural values of the area in the long term.
- To promote sound management practices for sustainable production purposes.
- To protect the natural resources from being alienated for other land-use purposes that would be detrimental to the area's biological diversity.
- To contribute to the regional and national development.

This entire rocky coast presents exceptional scenic quality especially when visiting caves, canyons and small bays by boat, e.g., Shpella e Haxhi Alisë and Duk Gjoni caves (Pergent, 2002; Qiriazi and Sala, 2006; Tilot and Jeudy de Grissac, 1994). The underwater landscape is also of exceptional quality with cliffs, submarine caves and associated fauna and flora, and in some places archaeological remains (Tilot and Jeudy de Grissac, 1994; Upton, 2006). This area is certainly the best and most impressive part of the Albanian coast for the development of nautical activities such as scuba diving, which is not well developed in Albania.

Marine habitat types identified in NMP Karaburun-Sazan until 2014 include:

- Biocenosis of the lower mediolittoral rocks,
- Biocenosis of mediolittoral caves,
- Biocenosis of the *Posidonia oceanica* meadows (=Association with *Posidonia oceanica*),
- Biocenosis of infralittoral algae,
- Coralligenous biocenosis, and
- Biocenosis of semi-dark caves.

The most important and sensitive species and biocenosis in the area Karaburuni Peninsula – Sazani Island are:

- Red coral (*Corallium rubrum*),
- Date mussel (*Lithophaga lithophaga*),
- Dusky grouper (*Epinephelus marginatus*),
- Starfish (*Ophidiaster ophidianus*),
- Coralligenous biocenosis,
- Biocenosis of *Posidonia oceanica* meadows,
- Biocenosis dominated by *Lithophyllum byssoides* (*Lithophyllum byssoides* rims),
- Biocenosis of infralittoral algae – Cystoseira communities.
- Monk seal (*Monachus monachus*),
- Short-beaked common dolphin (*Delphinus delphis*), and
- Loggerhead turtle (*Caretta caretta*).

Some important crustaceans like the lobster (*Homarus gammarus*), the crawfish (*Palinurus elephas*), the greater locust lobster (*Scyllarides latus*), and the spiny spider crab (*Maja squinado*) live in this area. These species are listed in the Annex III of the Barcelona Convention, as species whose exploitation isregulated. *Ophidiaster ophidianus* , a sea star of international concern, is a characteristic echinoderm of precoralligenous biocoenosis in this area. Noteworthy fish species of Karaburuni waters, included in the Annex III of the Barcelona Convention are: the dusky grouper (*Epinephellus marginatus*), the Atlantic bluefin tuna (*Thunnus thynnus*) and the swordfish (*Xiphias gladius*). (Beqiraj et al. , 2010). A number of studies related to marine protected areas have been conducted in Albania. However, a lot of fundamental research for the area is still lacking. Consequently, the Management Plan is also proposing activities related to scientific research and subsequent monitoring of key marine species and habitats. This research should be targeted towards management objectives of the MPA, which have been identified through the process of MP development.

There are no villages or permanent settlements in the NMP Karaburun-Sazan. The nearest local community is in Orikum Municipality, in the south-eastern part of the MPA, including Orikumi as the main centre and the villages of Dukati, Tragjasi and Radhima. In 2011 the population of the Orikumi Municipality was estimated at 11.954, in 3.964 households (average 3 members per household, which is a decline from 2001 when average size of a household was 4 members) (Puka, 2012). The population density in the Municipality of Orikum is low, with an average of 30 inhabitants per square kilometre. The key employment sectors in the surrounding area are: tourism (tourism related businesses as hotels, bars and restaurants, construction), fishing, state/public sector (education, health, social services, local administration), agriculture and livestock rearing. Private sector provides 90% of the employment. Agriculture and farming activities are not considered to be the main source of income for most of the resident population because of the difficulties of access to markets. There are illegal fishing activities in the rocky areas of both sides of Karaburuni Peninsula and sometimes in the western side of Sazani Island. Due to the lack of road access, tourist pressure in Sazani Island and Karaburuni Peninsula, especially in its western side, has been relatively low. The most frequented activities in this part, often associated with damages of habitats, are diving and spear gun fishing.

The access to Karaburuni and Sazani is provided by boat only, but it has not been practiced very much,

because suitable beaches are far away from Vlora and Orikumi. Beaches in the western side of Karaburuni (Bristani, Dafina, Grama), despite being clean, quiet and very attractive, are very little frequented, due to the lack of road access.

The following threats to the values have been identified:

- Degradation of Posidonia meadows.
- Degradation of coralligenous communities.
- Decreased fish stocks and harvesting of marine invertebrates.
- Degradation of geological formations.
- Pollution.
- Invasive species.

It is expected that tourism would be one of the most important uses of the MPA because of its natural and cultural resources. Littering discharges, pollution, construction and overuse (overcrowded beaches) are linked to negative effects of the tourist activities. Impacts associated with the activities that tourists undertake during a visit, such as swimming, sailing, snorkelling and scuba diving can be a chronic source of disturbance to marine organisms and could result in localized physical destruction of seagrasses, algae or coralligenous formations, even under low levels of use. Divers, tourists, and boaters can damage or steal archaeological assets, as well as artefacts from the shipwrecks, and they can also anchor on these sites, which cause their destruction. The increasing tourist demand for marine fish in Vlora area has caused the recent increase in aquaculture production. Lack of control over both legal and illegal activities will deteriorate the status of important natural values including seagrass meadows, coralligenous communities and/or fish stocks.

National Marine Park Karaburun Sazan is the first and for the moment the only marine protected area in Albania. As such it has a particular importance for educational and awareness raising activities related to marine environments as well as wise use of marine resources. The Management plan for the MPA has foreseen the establishment of several underwater trails that can be used for educational purposes on marine biodiversity, geology as well as historical values.

The potential use conflicts in the site could be between tourism and fisheries. While in the surrounding area transport, energy and growing urban pressure on the coastline will compete with the development of sustainable tourism. The legal text protecting the area does not provide for any zoning. The legal text protecting the area assigns the legal authority for the management of the area to the existing administration of the National Park Llogara. The authority responsible for the Management of the NMP Karaburun Sazan is the Directorate Regional of Forest Service in Vlora through its protected area section. Municipality of Orikum is also supporting the management, particularly through law enforcement and tourism management.

The management authority (Directorate Regional of Forest Service) has no means for protecting the area. The PA section in the Directorate Regional of Forest Service has only 3 people that are responsible for managing all protected areas in the region. The PA section has no vehicles, has limited equipment (especially field and monitoring equipment) and has limited (almost no) funds to cover operational costs. There is no staff dedicated to the site. UNDP/GEF project is for some years supporting the engagement of four rangers from Orikumi Municipality and Fishermen Management Organization. These persons are carrying out surveillance tasks in the area and report to the management authority.

Recently (February 2015), the government has established the National Agency for Protected Areas (NAPA) which will take over the management of protected areas in the country. The NAPA will have regional offices where key experts will be and a number of rangers for each protected area. Management Committee of the Marine National Park Karaburun-Sazan was established in 2012. The committee is responsible for the management and protection of the area, including implementation of the management plan. Law enforcement is shared between several institutions including State Environment and Forest Inspectorate, Fishing Inspectorate, State and Border Police, etc.

The management plan for the National Marine Park Karaburun Sazan has been developed in 2014 by WWF and INCA with the financial support of UNDP/GEF. The management plan is under review/approval process in the Ministry of Environment (to be approved by June 2015). The Management Plan has been developed through participatory approach, including four stakeholder workshops, meetings, questionnaires, etc., taking into account opinions and needs of local communities, local and regional governments, as well as central government. The state budget covers only the basic staff. UNDP/GEF project is supporting protection staff (rangers) as well as other important activities including development of the management plan and information measures and training. Total estimated funding necessary for the implementation of the NMP Karaburun-Sazan Management Plan for a 10 year-period amounts to EUR 678.000, including human resources and management activities. The Management Committee will ensure funding for the implementation of the Management Plan from the following funding sources: State Budget; Self-financing; Assistance from international organizations; Donations and sponsorships.

Annex XIV

Recommendations by the 12th Meeting of the Focal Points for SPAs concerning the future development of the activities on MAPs in ABNJ and the expected new project on this issue

Recommendations by the 12th Meeting of the Focal Points for SPAs concerning the future development of the activities on MPAs in ABNJ and the expected new project on this issue

POINTS OF RATIONALE

Achievement of the Aichi target 11 by 2020 through the implementation of the SPA/BD Protocol.

Suggestion to the NFP Technical meeting plenary of the SPA/BD Protocol for guidance of the RAC/SPA on the PoW and new projects on MPAs in Areas Beyond National Jurisdiction.

Consideration on the (three) areas already identified: Alboran Sea, Sicily Channel, Adriatic-Ionian Sea.

ELEMENTS FOR RECOMMENDATIONS OF THE MEETING TO RAC/SPA

1. EBSAs, as stemming from the Malaga meeting and included in the CBD repository, are considered as a common scientific basis to promote Area-Based Conservation Measures (ABCMs), including MPAs (as stated in Aichi Target 11) and a scientific tool, contributing to the development of a sound network of Mediterranean SPAMIs. It is pointed out though that so far there is no commitment or obligation for States to take concrete measures of establishing MPAs or ABCMs. (CBD Dec. XII/22) on the basis of these EBSAs.

2. EBSAs are still rather general as regards their scientific assessment, and different from each other in terms of description and content. Therefore, they need further scientific evaluation and assessment, though they already give a good indication of the location of significant areas. To facilitate setting out priorities in the context of the Barcelona Convention, and to progress toward the achievement of the Aichi Target 11 by 2020, it would be useful to identify specific hotspots, within (some) EBSAs, applying scientific, environmental methodologies and criteria (focusing on important and fragile ecosystems, habitats and species) that deserve urgent conservation and protection (restoration) where appropriate, in close cooperation with relevant international organizations.

3. Hotspots should be identified and addressed in a comprehensive scientific manner, ensuring their environmental wholeness (entity? coherence?), irrespective of legal or institutional borders that will be considered at an appropriate stage.

4. Human pressures and threats, impacts on the marine environment and the status in each hotspot, should be identified and assessed (also in relation to ECAP EO/OO/indicators, within the ECAP monitoring programme), in particular by using marine spatial planning, as much as possible, and taking into consideration the cumulative pressures and impacts on the same marine areas (hotspots).

5. Appropriate means, tools and processes, based on the already existing international and national legal frame (as appropriate for marine waters under NJ and high seas respectively) should be identified to address each specific pressure and threat assessed in each hotspot. Possible gaps of legal or institutional nature should be identified and reported to the Parties for consideration by the Barcelona Convention, as appropriate, on how to better overcome them. To this end, specific and focused cooperation with relevant international and regional conventions and agreements should be investigated.

6. Inclusion of related Adriatic-Ionian Sea activities in the implementation of the third pillar of the European Union Strategy for the Adriatic and Ionian Region (EUSAIR) could facilitate overcoming such gaps in this macro-region.

Furthermore, and in order to increase effectiveness and integration, when preparing the next steps the Secretariat is invited to ensure that there will be:

- full involvement of (all) relevant countries, through appropriate consultation process, in the preparation of the project and in its discussion with donor/s;
- participation of (all) relevant countries so wishing and, as appropriate, relevant international organizations in the Steering Committee to overlook on the project's implementation;
- transparent and competitive process to identify the team project, in consultation with (all) relevant countries;
- SMART objectives for the project, with adaptive capacity to changing implementation needs;
- clarity of objectives, content and timetable for each one of the projects to be included in the work programme for the next biennium.