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Agenda item 5: Conservation of Species and Habitats

5.1. Updating of the regional strategy and action plans for the conservation of the Mediterranean Monk Seal, Marine Turtles and Cartilaginous Fishes in the Mediterranean Sea

Draft Updated Action Plan for the Conservation of Mediterranean Marine Turtles

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I. Introduction

1. The Parties to the Barcelona Convention included among their priority targets for the period 1985-1995 the protection of Mediterranean marine turtles (Genoa Declaration, September 1985). To this purpose and as a response to growing international concern about the status of Mediterranean marine turtles, which encounter various threats, including mortality in fishing gear and loss of vital habitats on land (nesting beaches), they adopted in 1989 the Action Plan for the Conservation of Mediterranean Marine Turtles. In 1996, the Parties confirmed their commitment to the conservation of marine turtles by including the 5 species of marine turtle recorded for the Mediterranean in the List of Endangered and Threatened Species annexed to the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (Barcelona, 1995). The Protocol calls on the Parties to continue to cooperate in implementing the Action Plans already adopted.
2. Since 1989, the Action Plan has been revised three times. The first review was in 1999, when the updated version of the Action Plan was adopted by the 11th Conference of the Contracting Parties to the Barcelona Convention (COP11 Malta). The second review was in 2007 and concerned only the update of the timetable for the period 2008-2013. The last revision occurred in 2013 where the timetable has been updated for the period 2014-2019.
3. Two species of turtle nest in the Mediterranean, the Loggerhead turtle (*Caretta caretta*) and the Green turtle (*Chelonia mydas*). The Leatherback turtle (*Dermochelys coriacea*) is recorded fairly regularly in this sea, while the other two species (*Eretmochelys imbricata*, *Lepidochelys kempii*) are very rarely encountered. Loggerhead turtles also enter the Mediterranean from the Atlantic as juveniles in their oceanic stage and return to the Atlantic.
4. Marine turtles are reptiles and reptiles evolved on land. Though they have adapted well to living in the sea, their ties to their ancestors, leads them back to land to lay their eggs and reproduce. The intensive exploitation of turtles during much of last century has led to a virtual collapse of the turtle populations in the Mediterranean. Relatively new threats such as incidental catches and mortality in fishing gear and loss of nesting habitats face the remaining populations. The conservation of turtles, as a result of their biology, needs to address threats and issues both on land and in the sea. Marine turtles are long living reptiles and the recovery of populations is therefore a long process. Their reproduction on land poses threats to them, but it also provides opportunities, in a practical way, to help the species recover, for example by reducing predation. Good knowledge of their biology and needs is essential if this opportunity is to be used properly. Turtles do not nest every year and significant fluctuations from year to year in nesting activity are common, especially in green turtles. As a consequence, long term data are needed in studying populations and in drawing conclusions.
5. The wider issues of biodiversity conservation need to be taken into consideration in conserving any species, such as sea turtles. Threatened species are components of an ecosystem and the interdependence of the implementation of the various SPA/RAC Action Plans for endangered species and biodiversity conservation is stressed here.
6. There is clear evidence of important negative impacts on the populations of Mediterranean marine turtles by human activities. The most serious current threats/effects to turtles are:

- a. deterioration of the critical habitats for the life cycle of marine turtles, such as nesting, feeding and wintering areas, and key migration passages
 - b. direct impacts on turtle populations of incidental capture in fisheries, intentional killing, consumption, egg exploitation and boat strikes
 - c. pollution, which can have impacts on both habitats and species
7. Knowledge of the genetic stocks, status, biology and behaviour of marine turtles is increasing rapidly in the Mediterranean and though gaps still exist, sufficient information is available for conservation purposes. This information has been used in updating and improving the provisions of the present MAP Action Plan for the Conservation of the Mediterranean Marine Turtles⁴⁵. Sufficient information is also available in most cases to draw up National Action Plans for the conservation of marine turtles.
8. 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 adopted Ecosystem Approach (EcAp) to management of human activities with a view to conserve natural marine heritage and protecting vital ecosystem services recognizes that to achieve good environmental status "Biological diversity is maintained or enhanced". In this context, three common indicators related to marine turtles have been elaborated within the 27 common indicators of the Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast and related Assessment Criteria (IMAP):
- COMMON INDICATOR 3:** Species distributional range (EO1 related to marine mammals, seabirds, marine reptiles);
- COMMON INDICATOR 4:** Population abundance of selected species (EO1, related to marine mammals, seabirds, marine reptiles);
- COMMON INDICATOR 5:** Population demographic characteristics (EO1, e.g. body size or age class structure, sex ratio, fecundity rates, survival/mortality rates related to marine mammals, seabirds, marine reptiles)
9. The 2017 Mediterranean Quality Status Report (QSR)¹, within the analysis conducted on Common Indicators 3 (Species distributional range), 4 (Population abundance of selected species) and 5 (Population demographic characteristics) related to EO1 on marine mammals, seabirds and marine reptiles, focused on the major existing gaps related to the current knowledge about the presence, distribution, habitat use and preferences of these marine species stressing the need to increase efforts on filling these gaps in order to predict with any certainty the future viability of sea turtles populations in the Mediterranean. .
10. Information from various sources has been taken into account in this Action Plan. Effective protection and management of nesting areas, practical measures to reduce turtle by-catches, as well as the management of feeding grounds, based on scientific information, are some of the key elements that can help to ensure the survival and the recovery of populations of marine turtles. These elements have been paid due attention. Scientific information on population dynamics, tagging, biology, physiology, public awareness etc have also been given due attention in this plan.
11. The effective and sustainable protection of the Mediterranean marine turtles implies management of the Mediterranean as a whole, taking into account the ecosystem approach, and

¹ UNEP(DEPI)/MED IG.23/23 – Annex I "Key findings of the Mediterranean Quality Status Report and Recommendations for the Further Implementation of the Ecosystem Approach Roadmap".

should take advantage of the actions of all the concerned stakeholders and be carried out in cooperation with organisations, programmes and plans, at the supranational and national level such as the Mediterranean Action Plan (MAP); Fisheries Management Plans (FAO/GFCM); the Marine Turtle Specialist Group (IUCN/SSC); International Commission for the Conservation of Atlantic Tunas (ICCAT); International Commission for the Scientific Exploration of the Mediterranean Sea (ICSEM); relevant NGOs, Research institutions, Universities etc.

12. This Action Plan outlines objectives, priorities, and implementation measures in different fields as well as their coordination. The different components of the Action Plan are mutually reinforcing and may act synergistically.
13. The progress in implementing the Action Plan will be reviewed at each meeting of the National Focal Points for SPAs/DB, on the basis of national reports and of reports by SPA/RAC on the regional aspects of the Action Plan. The Action Plan will be assessed and revised and updated as necessary, every five years, unless the SPA Focal Point Meetings deem otherwise.

II. Objectives

14. The objective of this Action Plan is the recovery of the populations of *Caretta caretta* and *Chelonia mydas* in the Mediterranean (with priority accorded to *Chelonia mydas*, wherever appropriate) through:

- Appropriate protection, conservation and management of marine turtle habitats, including nesting, feeding and wintering areas and key migration passages.
- Improvement of the scientific knowledge by research and monitoring

III. Priorities

15. Acknowledging the progress achieved over the past years and the proliferation of projects, activities and actions in many countries in the region, it is considered an overarching priority action to continue and enhance such ongoing projects and activities related to marine turtle conservation, research and monitoring. The following priorities have been identified for each component of this Action Plan:

III.1. Protection and management of the species and their habitats

- a. Development, implementation and enforcement of specific legislation on sea turtles;
- b. Protection and effective management of nesting areas (including the adjacent sea);
- c. Protection and management of feeding, wintering and mating areas and key migration passages;
- d. Minimization of incidental catches and elimination of intentional killings.
- e. Restoration of degraded nesting beaches

III.2. Research and monitoring

16. Knowledge needs to be improved in the following topics:

- a. Identification of mating, feeding and wintering areas and key migration passages;
- b. Identification of potential and new nesting areas;
- c. Biology of the species, in particular aspects related to life cycles, population dynamics and population trends and genetics;
- d. Assessment of fisheries interactions and associated mortalities, including modification of fishing gear and related socioeconomic issues;
- e. Assessment and improvement of nesting beach management techniques;
- f. Strengthening the regional network of stranding networks
- g. Strengthening the data collection of stranded sea turtles through National stranding networks and rescue centers;
- h. Assessment of population trends through long term monitoring programmes, both on nesting beaches and at sea based on the IMAP developed within the framework of the EcAp process of the Barcelona Convention as well as the monitoring requirements set under the MSFD of the EU.
- i. Impact of climate change.

III.3. Public awareness and education

17. For the implementation of this action plan, public support is needed. Information and education campaigns on relevant turtle conservation issues should target groups such as:

- a. Local residents and visitors to nesting areas;
- b. Fishermen and other stakeholders;
- c. Tourists and tourism-related organizations;
- d. Schoolchildren and teachers;
- e. Decision makers at national, regional and local levels.
- f. Appropriate training/education of stakeholders can be given (e.g., to fishermen and tourism workers)

III.4. Capacity building/Training

18. Training of managers and other staff of protected areas in conservation and management techniques and of scientists, researchers and other staff in conservation, research and monitoring in the priority issues covered by the Action Plan.

III.5. Coordination

19. Promote and enhance cooperation and coordination among the Contracting Parties, the UNEP/MAP partners, relevant organizations and projects carried out in the field of sea turtles conservation. Priority should be given to the regular assessment of the progress in the implementation of this Action Plan.

IV. Implementation Measures

20. The implementation of the measures recommended in this Action Plan will only be possible with the appropriate support by the Parties and by competent international organizations, particularly as regards the provision of adequate financial support, through national and regional funding programmes and through support for applications to donors for projects. Much progress has been achieved over the past years, with the proliferation of projects, programmes, activities and actions in many countries around the Mediterranean. The implementation and coordination of such ongoing activities related to marine turtle conservation, research and monitoring is expected to benefit from the provisions of this Action Plan.

IV.1. Protection and Management

21. With regard to protection and management, the following measures are recommended:
 - (a) Legislation
22. The Contracting Parties that have not yet extended legal protection to marine turtles should do so as soon as possible.
23. Each Contracting Party should develop and implement as soon as possible the necessary legislation for the protection, conservation and/or management of areas important for marine turtles, such as nesting (including the adjacent sea), feeding, wintering and mating areas and key migration passages.
24. In pursuing the above the Contracting Parties should take into account the provisions of the relevant international conventions and supranational legislation as well as the SPA/RAC "Guidelines to Design Legislation and Regulations Relative to the Conservation and Management of Marine Turtles Populations and their Habitats".
25. Legislation on deliberate killing must be enforced and updated in some Countries and developed in others totally lacking these measures

(b) Protection and Management of Habitats

26. Integrated management plans should be elaborated and implemented for terrestrial and marine areas critical for nesting, feeding, wintering and mating, as well as key migration passages.
27. Measures and management rules aimed at protecting critical habitats, on land and at sea, should be developed and implemented. In the case of nesting areas, such measures should cover issues such as public access, use of vehicles and horse riding, use of artificial lights, nautical activities, minimization of predation, inundation, disturbance during nesting, disturbance in adjacent waters, etc. In the case of marine areas such measures should address boat traffic and fishing. Contracting Parties are encouraged to use the SPA/RAC “Guidelines for setting up and management of Specially Protected Areas for marine turtles in the Mediterranean”²
28. Training of the staff involved in protection and management activities is a pre-requisite to good management.

(c) Minimisation of Incidental Catches and Elimination of Intentional Killings

29. A reduction of incidental catches and mortality can be achieved by:
 - a. Applying appropriate regulations concerning fishing depth, season, gear, etc, especially in areas with a high concentration of turtles;
 - b. The modification of fishing gear, methods and strategies proven to be effective, and as appropriate, their introduction in fisheries legislation and fishing practices;
 - c. Education/training of fishermen to correctly haul, handle, release and record incidentally caught turtles. Use of appropriate methods are described inter alia in the SPA/RAC publication “sea turtle handling guidebook for fishermen”
30. Deliberate killing and exploitation of marine turtles can be eliminated by:
 - a. Applying and enforcing appropriate legislation;
 - b. Carrying out campaigns among fishermen in order to urge them to release marine turtles caught incidentally and to participate in the information networks on turtles (report sightings of turtles, of tags, participation in tagging programmes, etc.);
 - c. Carrying out campaigns for fishermen and local populations to facilitate the implementation of legislation to ban the exploitation/consumption and trade/use of all products derived from marine turtles.
 - d. The above will help also in reducing mutilations and killing of turtles due to ignorance and/or prejudice.

(d) Other Measures to Minimise Mortality

31. The setting up and proper operation of Rescue Centers and First Aid Stations is suggested as an additional means to minimize individual turtle mortality. Rescue Centers may also play an important role for the conservation of the populations by contributing to activities such as awareness, education, and data collection. The use of the SPA/RAC “Guidelines to Improve the Involvement of Marine Rescue Centers for Marine Turtles is recommended.
32. There is a need to develop a common methodology for the management of rescue centers including methods for the collection and transfer of related data

² http://www.rac-spa.org/sites/default/files/doc_turtles/g_1_manag_mpa_turtles_en_fr.pdf

33. Training of the staff involved is necessary. In addition, a Mediterranean-wide rescue network should be set up, to assist the exchange of knowledge and experience among those who work with turtles in facing difficulties. The network should include already existing rescue centers and promote the establishment of new rescue centers in countries, which are currently lacking adequate structures.

IV.2. *Scientific Research and Monitoring*

34. The development of research and monitoring programmes and the exchange of information, should focus on the priority fields for the conservation of marine turtle populations, by using various methods, such as beach surveys and monitoring of nesting beaches - especially long term monitoring, tagging (keeping in mind the provisions of the SPA/RAC tagging guidelines), data logging, satellite telemetry, Geographic Information Systems (GIS), genetics, on-board observers and modelling.

(a) Scientific Research

For research these should cover inter alia the following (not in order of priority):

- a. Identification of mating, feeding and wintering areas and key migration passages;
- b. Identification of potential or new nesting areas;
- c. Biology of the species, in particular aspects related to life cycles, population dynamics and population trends and genetics. Contracting parties are encouraged to use the "Guidelines to standardize methodologies to estimate demographic parameters for marine turtles populations in the Mediterranean".
- d. The assessment of turtle by-catch and respective mortality rates from different fishing gear, including small scale and artisanal fisheries;
- e. Data on the effects of gear modifications (new hooks etc) and fishing strategies should be collected to evaluate the effects of these on turtle mortality and catch rates as well as the effects on other species;
- f. The socio-economic effects of the implementation of turtle conservation measures that can impact fisheries need to be evaluated;
- g. Development of management techniques for nesting beaches and foraging areas;
- h. Impact of climate change on marine turtles;

(b) Monitoring

35. For monitoring, programmes should follow the recommendation of the MAP ecological objectives, the IMAF and the relevant Protocol³. They should cover inter alia the following (not in order of priority):

- a. Encourage long-term monitoring programmes for important nesting beaches and foraging areas. All Contracting Parties that have nesting beaches or foraging areas should encourage the uninterrupted and standardized monitoring taking into account their national monitoring programmes related to the biodiversity. Where such programmes do not exist, the Parties should set up such programmes or encourage them. Surveys of nesting beaches of lesser importance and of scattered nesting need also to be undertaken occasionally if possible, so that a more complete picture of populations can be formed. Contracting Parties are encouraged to use the SPA/RAC "Guidelines for the long-term Monitoring programmes for marine turtles nesting beaches and standardized monitoring methods for nesting beaches, feeding and wintering areas"

³ Monitoring protocol of marine turtles in the Mediterranean

- b. Onboard observation programmes to gather precise data on species biology and fisheries induced mortality should complement nesting beaches and foraging areas monitoring;
 - c. Strengthening the data collection of stranded sea turtles through National stranding networks and rescue centers
 - d. Contracting Parties, with the help of national, regional or international organisations, should undertake, when appropriate, joint monitoring initiatives on a pilot basis, with the aim to share and exchange best practices, using harmonized methodologies, and ensuring cost efficiency.
 - e. Contracting Parties should support and take part in regional initiatives and projects led by competent partner organizations that will contribute to the implementation of the initial phase of the IMAP in order to strengthen strategic and operational regional synergies.
 - f. Contracting Parties should report regularly quality assured data
36. For some Contracting Parties there is still little information on turtle nesting beaches and size of breeding populations. These Parties should undertake urgently more comprehensive surveys and encourage the setting up of long-term monitoring programmes taking into account their national monitoring programmes related to biodiversity.

IV.3. Public Awareness and Education

37. Public-awareness programmes, including appropriate multiple information tools (special documentary information material, electronic media etc), should be developed for fishermen, local residents, tourists and tourism-related organizations, to help reduce the mortality rates of marine turtles, to induce respect for nesting, feeding and wintering and mating areas, and to promote the reporting of any useful information concerning sea turtles. Appropriate training/education of stakeholders can be given (e.g., to fishermen, tourism workers)
38. Information campaigns directed at local authorities, residents, teachers, visitors, fishermen, decision makers at local, regional and national levels and other stakeholders, are urgently needed in order to enlist their participation in the efforts for the conservation of marine turtles and for their support for conservation measures.

IV.4. Capacity Building/Training

39. Existing training programmes should be continued, particularly for those Parties that need more expertise and/or experts with specialized knowledge of marine turtles, and for managers and other staff of protected areas, in the conservation and management techniques needed (these include inter alia beach management, tagging and monitoring).
40. In particular, training programmes in the setting up and operation of Rescue Centers should be continued, with the aim of guaranteeing that these centers have skilled personnel, appropriate equipment and adopt common methodologies for data collection. Training programmes to be elaborated for other fields, as needed, especially where fisheries managers are concerned.

IV.5. National Action Plan

41. Contracting Parties should establish National Action Plans for the conservation of marine turtles.
42. National Action Plans should address the current factors causing loss or decline of turtle population and their habitats, suggest appropriate subjects for legislation, give priority to the protection and management of coastal and marine areas, the regulation of fishing practices and ensure continued research and monitoring of populations and habitats as well as the training and refresher courses for specialists and the awareness-raising and education for the general public, actors and decision-makers.

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

IV.6. *Regional Coordination Structure*

44. It is necessary to develop cooperation and exchange of information among the Contracting Parties for the implementation of the Action Plan and to improve the coordination of activities within the region.
45. SPA/RAC is considered to be the most appropriate existing mechanism for this coordination. The implementation of the Action Plan may be carried out, in cooperation with other bodies concerned, through establishing MoCs, as necessary.
46. The major function of the coordinating mechanism with regard to marine turtles would be to:
- Assess the progress achieved in implementing this Action Plan. SPA/RAC will request at regular intervals, not exceeding two years, update reports from the Parties and, on the basis of these ongoing national reports and of its own assessment of the progress in the regional component of this Action Plan, prepare reports to be submitted to the SPA National Focal Point meetings, which will make follow-up suggestions to the Contracting Parties.
 - Collect and evaluate the data at Mediterranean level
 - Prepare inventories of networks of protected areas for marine turtles in the Mediterranean and facilitate the operation of such networks and of networks on such issues as marine turtle habitats, ecology, conservation etc
 - Prepare a timetable of activities and financing proposals for the Contracting Parties' meetings;
 - Contribute to the dissemination and exchange of information;
 - Work further and create more opportunities with relevant partner organizations, in order to strengthen technical support that countries might need to implement the IMAF in relation with marine turtles.
 - Assist and/or organize expert meetings on specific topics regarding marine turtles
 - Continue to support the organisation of the Mediterranean Marine Turtle Conferences
 - Assist and/or organise, training courses and support and catalyse the participation of appropriate scientists and other staff in such courses.
47. Complementary work carried out by other international bodies, NGOs and UNEP/MAF partners aiming at the same objectives should be encouraged and capitalized to prevent possible overlapping and help disseminate their knowledge across the Mediterranean Community.
48. Coordinate the activities needed for the revision/updating of this Action Plan every five years, or earlier, if this is deemed necessary by the SPA/DB National Focal Point meetings, or on the basis of important new information becoming available.
49. The inventory of marine turtle critical habitats, including key migrations passages, in the Mediterranean, should be regularly reviewed in the light of increased knowledge and published online through the Mediterranean biodiversity Platform⁴.

IV.7. *Participation*

50. Any interested international and/or national organisation is invited to participate in actions necessary for the implementation of this Action Plan
51. Links with other bodies responsible for Action Plans dealing with one or more species of marine

⁴ <http://data.medchm.net>

turtles should be made, to strengthen co-operation and avoid duplication of work.

52. The co-ordination structure shall set up a mechanism for regular dialogue between the participating organisations and where necessary, organise meetings to this effect.

IV.8. "Action Plan Partners"

53. 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/BD, grant the status of «Action Plan Partner» 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.

Annex I - Implementation Timetable

ACTION	Deadline⁵ / periodicity	By Whom
A. PROTECTION AND MANAGEMENT		
A.1 Legislation		
a. Protection of turtles – general species protection	As soon as possible	Contracting Parties
b. Enforce legislation to eliminate deliberate killing	As soon as possible	Contracting Parties
c. Habitat protection and management (nesting, mating, feeding, wintering and key migration passages)	As soon as possible	Contracting Parties
A.2 Protection and Management of habitats		
a. Setting up and implementing management plan	Immediate and continuous	Contracting Parties
b. Restoration of damaged nesting habitats	Immediate and continuous	Contracting Parties
A.3 Minimisation of incidental Catches		
a. Fishing regulations (depth, season, gear) in key areas	Immediate and continuous	Contracting Parties
b. Modification of gear, methods and strategies	Immediate and continuous	SPA/RAC, Partners & Contracting Parties
A.4 Other Measures to Minimise individual Mortality		
a. Setting up and/or improving operation of Rescue Centres	continuous	Contracting Parties
a.1 Elaborate guidelines for the management of rescue centers, including methods for data collection	1 year after adoption	SPA/RAC
B. SCIENTIFIC RESEARCH AND MONITORING		
B.1 Scientific Research		
a. Identification of new mating, feeding and wintering areas and key migration passages;	continuous	Contracting Parties and Partners
b. Elaboration and execution of cooperative research projects of regional importance aimed at assessing the interaction between turtles and fisheries	continuous	SPA/RAC, Partners & Parties
c. Tagging and genetic analysis (as appropriate)	continuous	SPA/RAC and Contracting Parties and Partners

⁵ The deadlines mentioned are not intended in any way to postpone or delay the drafting and/or the implementation of legislation or management plans or of monitoring programmes etc. that already exist and/or are ongoing

d. Facilitate the networking between managed and monitored nesting sites, aiming at the exchange of information and experience	continuous	SPA/RAC
B.2. Monitoring		
a. Setting up and/or improving long-term monitoring programmes for nesting beaches, feeding and wintering areas	continuous	Contracting Parties and SPA/RAC
b. Elaboration of protocol for data collection on stranding	2 years from adoption	SPA/RAC
d. Setting up national stranding networks	as soon as possible	Contracting Parties
C. PUBLIC AWARENESS AND EDUCATION		
Public awareness and Information campaigns in particular for fishermen and local populations	continuous	SPA/RAC, Partners and Contracting Parties
D. CAPACITY BUILDING		
Training courses	continuous	SPA/RAC and Partners
E. NATIONAL ACTION PLANS		
Elaboration of National Action Plans	continuous	Contracting Parties
F. COORDINATION		
a. Assessment of progress in the Implementation of the Action Plan	Every Five years	SPA/RAC and Parties
b. Cooperation in organising the Mediterranean Conferences on marine turtles	Every three year	SPA/RAC
c. Updating the Action Plan on Marine Turtles	Five years from adoption	SPA/RAC

Annex II - Recommendations and Guidelines on Tagging⁶ in the Mediterranean

VI.1. General Recommendations:

- a. It is stressed to all prospective tagging projects that **tagging is not a conservation measure** and that it is not an alternative to conservation. All it can do, at best, is to help get information on which to base conservation policy and actions
- b. Encourage enforcement, at national level, of permitting legislation for tagging. This is to ascertain that **aimless tagging** does not take place and that tagging teams/persons or organizations have well thought out plans and aims and adequate training for what they are intending to do
- c. There is a need for **training courses** in planning and undertaking tagging projects and/or support in training in the field (with the provision of experts), particularly for new projects
- d. There is a need for **support** for tagging, with equipment, materials etc for projects that are qualified for such work (having undertaken adequate planning, training etc)
- e. Tagging equipment should if possible be provided after a request and the tags provided should carry the **return address** of the project or country
- f. There is a need in the countries for **advice and guidelines**, given inter alia through SPA/RAC and its website www.spa-rac.org, on tagging issues, providing links to key websites such as www.seaturtle.org and its **Tag Finder** site, as well as to the **ACCSTR Sea Turtle Tag Inventory** www.accstr.ufl.edu, encouraging visitors to register their tag series in this database. Duplication of effort will be avoided this way
- g. Tagging is not to be taken lightly and minimum guidelines are needed to ensure the wellbeing of turtles (the basic **Guidelines to minimize damage/disturbance to turtles by tagging** were drafted by the relevant SPA/RAC WG - see below)
- h. The development of simple practical materials (stickers etc) for **awareness** campaigns for fishermen and other stakeholders (e.g., coastal communities) will be useful.
- i. A **Regional Inventory of Tagging Projects** is needed and is in fact a priority issue. This should be updated as new information becomes available and should be available on line. (A **questionnaire** was drafted by the working group and was submitted to the participants of the workshop for completion. It is available from SPA/RAC for anybody who wishes to be included in the Inventory).

VI.2. Guidelines to minimize disturbance/damage to turtles by tagging

Metal tags

- j. Do not use Style 1005-49 metal tags (National Band and Tag Company (NBTC) USA)
- k. Use size 681C (National Band and Tag Company (NBTC) USA) - for turtles over 30 cm CCL (i.e., do not tag turtles smaller than 30cm CCL)
- l. Do not use tags in juvenile turtles in such a way as to constrict the growth of the flipper

Plastic tags

- m. Do not use Jumbo tags (Jumbotag - Dalton supplies Ltd, UK) for turtles smaller than 50cm CCL
- n. Do not use Rototags (Rototag - Dalton supplies Ltd, UK) for turtles smaller than 30 cm CCL

⁶ Though explicit mention is made in the Guidelines above of specific trade names (Dalton and National Band and Tag Company), the guidelines are applicable to similar tags (material, size etc) made by other manufacturers. Specific mention was made of these manufacturers and tags, as these are the tags most commonly used for tagging turtles and are hence well known.

Pit tags

- o. Do not use PIT tags (Passive Integrated Transponder tags) in turtles smaller than 30 cm CCL
- p. If you use PIT tags, then apply them under the scales or between the digits, in the muscle, on the front left flipper.

General

- q. Do not use tagging methods proven to be unsatisfactory
- r. Do not tag a turtle on her way up the beach or during egg-laying. Tag after the egg chamber is covered or if the turtle is on her way back to the sea.
- s. Do not turn turtles over for tagging

Annex III-
**Report on the State of Implementation of the Action Plan for the Conservation of marine turtles
in the Mediterranean**

I. INTRODUCTION

1. The UNEP/MAP Action Plan for the conservation of marine turtles in the Mediterranean was adopted in 1989 following the decision of the Mediterranean Countries to include the protection of endangered marine species, in particular sea turtles, among the ten targets to be achieved as a matter of priority during the period 1985-1995 (Genoa Declaration of 1985), and their commitment to react with concrete instruments, even if not legally bindings.
2. The Action Plan, as all other APs established in the UNEP/MAP context, is reviewed and updated every five years and submitted to the official meetings of the National Focal Points for the Specially Protected Areas (SPAs) for its consideration and to the Conferences of the Parties to the Barcelona Convention (COPs) for its final adoption.
3. Since 1989, the Action Plan has been revised three times. The first review was in 1999, when the 11th Conference of the Contracting Parties to the Barcelona Convention (COP11 Malta) adopted the updated version of the Action Plan. The second review was in 2007, where a new update of the Action Plan was submitted to the 8th Meeting of the National Focal Points for SPAs (Palermo, June 2007). On that occasion, the updated timetable for the period 2008-2013 was adopted. The last revision occurred in 2013 where, during the 11th Meeting of the Focal Points for SPAs (Morocco, 2-5 July 2013) the updated timetable of the action plan for the period 2014-2019 was discussed and adopted⁷
4. In 2015, the focal points for SPAs met for the 12th time, in Athens, to discuss, among the others, the progress made in the implementation of the Action Plan for the conservation of sea turtles. It was reported, in particular, that the majority of the protection measures undertaken by the Parties were addressed to sea turtles nesting sites with a relevant lack of protection and management in all other sea turtles key areas as foraging and breeding areas and migration corridors⁸ The same gap was reported in 2017, during the 13th meeting of the Focal points for SPAs, in Alexandria, where SPA RAC informed about the organization of an increasing number of research programmes and raising awareness campaigns, in collaboration with the relevant Non Governmental Organizations, on the matter. During the meeting, it was also stressed that the main difficulties in the implementation of the Action Plan for sea turtles were due to the serious lack of financial resources as well as to the absence of technical and scientific capacities⁹.
5. In the period 2014-2019 two Mediterranean Conferences on marine turtles took place respectively in Turkey, Dalian, in 2016 and in Porec, Croatia, in 2018. One of the main outcomes of the 5th Conference of 2016 was, in particular, the establishment of a working group on sea turtles demography with the ultimate aim to create a demographic model that could help managers to foresee the future evolution of sea turtles populations nesting in the Mediterranean. Such model should be a tool for the easy and fast collection and evaluation of data and information on sea turtles thus contributing to the identification of more effective protection measures.
6. The 2017 Mediterranean Quality Status Report (QSR)¹⁰, within the analysis conducted on Common Indicators 3 (Species distributional range), 4 (Population abundance of selected species) and 5 (Population demographic characteristics) related to EO1 on marine mammals, seabirds and marine

⁷ *Status of implementation of the action plans for conservation of marine turtles, birds and cartilaginous fishes* - UNEP(DEPI)/MED WG.382/Inf.11.

⁸ Report of the 12th Meeting of the Focal Points for the Specially Protected Areas - UNEP(DEPI)/MED WG.408/18 Rev.1

⁹ Report of the 13th Meeting of the Focal Points for Specially Protected Areas - UNEP(DEPI)/MED WG.431/2 Rev.2

¹⁰ UNEP(DEPI)/MED IG.23/23 – Annex I “Key findings of the Mediterranean Quality Status Report and Recommendations for the Further Implementation of the Ecosystem Approach Roadmap”.

reptiles, focused on the major existing gaps related to the current knowledge about the presence, distribution, habitat use and preferences of these marine species stressing the need to increase efforts on filling these gaps in order to predict with any certainty the future viability of sea turtles populations in the Mediterranean.

7. In December 2017, the Conference of the Parties to the Barcelona Convention (Tirana, COP20) requested SPA/RAC, for the biennium 2018-2019, to update the current Action Plan for the conservation of marine turtles by taking into consideration the progress made over the last six years, since the last update in 2013, as well as the gaps and difficulties encountered by the Parties in its implementation.
8. This report describes, indeed, the state of play with respect to the implementation, at regional and national levels, of the Action Plan for the conservation of marine turtles in the Mediterranean. The update Action Plan, which will be developed on the basis of this report, It will be first submitted to the SPA thematic Focal Point meeting of next June for their consideration and endorsement and then to the 21th Conference of the Parties of Barcelona Convention of December 2019 (COP21) for its final adoption.

II. COLLECTION OF DATA (METHODOLOGY OF WORK)

9. Data and information on the status of implementation of the MAP Action Plan for the Conservation of Marine Turtles in the Mediterranean have been collected from the Contracting Parties to the Barcelona Convention, on one side, and from the Action Partner partners involved. Feedback from both sides is relevant in consideration of the fact that the Action Plan is addressed to Institutions and Governments and also to researchers, organizations and stakeholders and the activities carried out in these different contexts are all necessary for the achievement of the main object, which is the conservation of Mediterranean sea turtles.
10. The Contracting Parties have submitted their information on the Action Plan through the revised online reporting format for the implementation of the Barcelona Convention and its Protocols, in particular section 05-SPA and Biodiversity Protocol, which was adopted at COP20 in 2017. Twelve eleven Parties have submitted the report and, in particular, Albania, Algeria, Bosnia – Herzegovina, Croatia, France*11, Italy, Lebanon, Spain, Monaco, Montenegro, Slovenia and Turkey.
11. In addition, an evaluation questionnaire on the implementation of the Action Plan for the conservation of marine turtles in the Mediterranean has been prepared and distributed to all Action Plan partners, non governmental organizations and relevant researchers involved in marine turtles conservation (Annex III)

III. ASSESSMENT OF THE ACTIVITIES UNDERTAKEN TO IMPLEMENT THE ACTION PLAN

12. Below is presented an analysis of the state of play with respect to the implementation of the Action Plan on marine turtles by the Contracting Parties to the Barcelona Convention. The analysis is based on information and data provided by those Parties that have answered to the online questionnaire mentioned above. Yet, considering that only 12 Parties over 21 have answered to the questionnaire, namely Albania, Algeria, Bosnia-Herzegovina, Croatia, France, Italy, Lebanon, Monaco, Montenegro,

* The observatoire des tortues marine de France Metropolitaine responded on behalf of the NFP: the related information is given in the section 4

Slovenia, Spain and Turkey, a complete framework of the state of implementation of the AP in the Mediterranean cannot be provided.

The analysis consists, first, in the assessment of the state of play with respect to the implementation of each Priority (Activity A, B, C, D, E) and, in particular, of their related measures and sub activities. The main difficulties encountered by the Countries are also identified. Some recommendations on how to fill the gap are also proposed, where possible.

ACTIVITY A - PROTECTION AND MANAGEMENT

13. This is priority no. 1 of the Action Plan, which comprises the following four measures that Contracting Parties must comply with:
- a. Legislation
 - b. Protection and Management of Habitats
 - c. Minimization of Incidental Catches
 - d. Elimination of Intentional Killings

Each measure foresees a number of specific activities to be implemented by all Parties to the Barcelona Convention.

A.I. Legislation

14. According to the AP, all Parties must develop and implement legal measures for the protection and management of sea turtles. These measures should address both sea turtles and their key habitats (nesting, feeding, wintering, mating areas and migration corridors) as well as all fishing practices seriously damaging these species.

a. Protection of turtles - General species protection

15. State of implementation: eight Countries over eleven declared to have National Legislative measures in place. In general, no Country has a National law specifically regulating sea turtles protection. Such protection is guaranteed, though, through wider laws, regulations or decrees on nature and species protection. The Government of Albania declared, for example, that these species are considered protected because included in the Albanian Red List of 2013. In Croatia, sea turtles are legally protected through the Nature Protection Act¹² and the Ordinance on Strictly Protected Species¹³ while in Lebanon the Ministerial Decisions No. 279/1 of 1998, banning the fishing of marine turtles, and No. 125/1 of 1999 protecting and banning the fishing of whales, monk seals and marine turtles are considered as legal measures of protection. Monaco mentioned the “Sea Code¹⁴” on the protection of the marine environment, which assigns a status of protection to those species included in the Annex II¹⁵ of the Protocol on Specially Protected Areas and Biological Diversity (SPA/BD Protocol) of the Barcelona Convention. In Slovenia sea turtles are protected by National Law and listed under Annex A of the Declaration on the Protection of Wild Animal Species of Slovenia. Italy, Spain and Turkey protect sea turtles by law. Montenegro reported about the decision to establish protection measures for particular species of flora and fauna, including sea turtles. The identification of the distribution protected species along the coast of Montenegro is under development within the framework of the

¹² Official Gazette 80/13, 15/18, 14/19

¹³ Official Gazette 144/13, 73/16.

¹⁴ <https://www.legimonaco.mc/305/legismclois.nsf/ViewCode/1D61E79F2C43022EC125808A002EDCD3!OpenDocument>

¹⁵ http://www.rac-spa.org/sites/default/files/annex/annex_2_en_20182.pdf

following projects: MedMPAnet, MedkeyHabitat, 4M “Further MSP pilot projects for Adriatic along the coast” and “Promotion of coastal biodiversity protection and establishment of MPAs”.

16. Yet, Algeria and Bosnia –Herzegovina didn’t answer to the question. The Government of Algeria declared that work is ongoing for the drafting of the list of endangered or threatened animal and plant species and that sea turtles have been included in the Decree no. 12-235 of 24 May 2017 on the list of non-domestic species to be protected. As for Bosnia-Herzegovina, no data are reported on the presence of sea turtles in their seas and along their coasts and no protection measures for these species are therefore foreseen in these States.
17. Main difficulties for implementation: the lack of financial resources and technical competences are the main difficulties reported by the Countries (Algeria, Bosnia Herzegovina and Lebanon) impeding the development of projects or scientific research aimed at the identification of local species of sea turtles and the collection of data on their presence, which is the basis for the creation of legal measures or regulations on their protection.
18. Recommendations: It is urgent to pay attention to those Countries claiming the lack of financial and technical resources in order to establish specific protection measures on sea turtles (Algeria) and identify the presence of these species in their waters (Bosnia-Herzegovina).

b. Enforce legislation to deliberate killing

19. State of implementation: only six Countries (Albania, Croatia, Lebanon, Slovenia, Spain and Turkey) declared to have enforced laws prohibiting the deliberate killing of sea turtles. In some of them, such legislation is pretty old as in Turkey, where the law on deliberate killing was established by the Ministry of Agriculture and Forest in 1982, and Lebanon with the 1998 Ministerial Decree no. 279/1. More recent are the Albanian law no.64 of 2012 prohibiting all forms of intentional capture or killing of protected species including sea turtles, the Spanish Biodiversity Act of 2015 and the Croatian Nature Protection Act of 2018 both including a provision on such prohibition. Slovenia reported to have a law on deliberate killing but no references have been provided about date and typology of such legislation.
20. As for the other Countries examined: Monaco and Italy resulted not applicable, Montenegro and Algeria didn’t reply while Bosnia Herzegovina mentioned the Nature Protection Law prohibiting the killing of all threatened species included in the National Red List, which does not include sea turtles, though.
21. Main difficulties for implementation: lack of financial and technical resources especially in those Countries that still do not have any legal measures in place for the protection of sea turtles (Bosnia-Herzegovina, Montenegro, Algeria).
22. Recommendations: Until legal measures or regulations on the protection of sea turtles under point AI. a of the Action Plan are not enforced, no specific law on deliberate killing of sea turtles can be established.

c. Habitat protection and management (nesting, mating, feeding, wintering and key migration passages)

23. State of implementation: for the moment being, the protection and management of sea turtles critical habitats is not effectively and fully guaranteed. In general, only those habitats, which are already included in National protected areas or Sites of Community Interest as for Natura 2000 network (Italy,

Spain, Croatia), results to be protected but this protection is a consequence of being strategically located in a protected areas. In Italy, for example, only those nesting sites falling within Natura 2000 network or in National marine protected areas benefit from protection and management measures. On the contrary, feeding, wintering and key migration passages, in Italy, are not currently protected even if under evaluation by Italian Research Institutes and Universities. The same for Croatia, where sea turtles habitats enjoy protection whether included in the territory of protected areas according to the Nature Protection Act. Spain has recently recognized the migratory corridor of Cetaceans which protects as a consequence also sea turtles critical habitats¹⁶. Algeria declared that work is ongoing to implement this measure while no information is provide by Albania, Monaco, Montenegro, Slovenia and Turkey.

24. Main difficulties for implementation: a general lack of information on this measure is reported. Not all the mentioned habitats or sites are managed and protected at the same level, when and if they are protected. For example, nesting sites are generally protected if they are included in marine protected areas, but wintering and feeding habitats and key migration passages are not. The main difficulty is, therefore, the lack of scientific research aiming specifically at the identification and recognition of critical habitats for sea turtles.
25. Recommendations: promotion of research projects aiming at the identification of sea turtles critical habitats in the Mediterranean (mainly feeding, wintering habitats and migration corridors).

A.2 Protection and Management of Habitats

a. Elaborate guidelines for the management of protected areas including key habitats

Achieved by SPA/RAC.

b. Setting up and implementing management plans

26. State of implementation: management plans specifically directed to sea turtles are not in place. Countries as Italy, Monaco and Slovenia declared not to have such plans while Albania and Montenegro didn't even reply to this question. Spain mentioned that discussions are ongoing in order to assess whether there is a real need for these plans or it may be enough to establish specific protocols as the one on nesting sites. Croatia as well has worked, within the framework of the IPA Adriatic CBC NETCET project, on a national management plan including an action plan for the conservation of marine turtles whose last version was finalized in 2018. Turkey is the only Country declaring to have a management plan on sea turtles but no details on this plan have been provided.
27. Main difficulties for implementation: lack of financial resources (Algeria) and no scientific data on the presence of marine turtles allowing for legislative regulations like the said management plan (Bosnia-Herzegovina).
28. Recommendations: promotion of research projects, including financial assistance, mainly in Bosnia - Herzegovina where no surveys on the presence of sea turtles populations have been ever made so far.

¹⁶ See Table I : Summary of the filled questionnaires received

c. Restoration of damaged nesting habitats

29. State of implementation: there is no information about the implementation of this activity from the Parties of Barcelona.
30. Recommendation: this measure needs to be taken into high consideration given the increasing threats on nesting habitats due to change in land use, tourism, degradation of habitats and beach erosion, illegal anthropic activities and pollution.

A.3 Minimization of incidental Catches

a. Fishing regulations (depth, season, gear) in key areas

31. State of implementation: fishing regulations specific to sea turtles key areas do not exist. Countries as Albania and Bosnia-Herzegovina declared to have laws on fishing, which are general, though, mainly because key areas have not been identified yet. In addition, harbour masters do not have enough technical, financial or human capacities to deal with illegal fishing in their territory. Croatia, Italy, Monaco, Montenegro and Turkey reported no to have laws of this type and Spain mentioned a legal act establishing mitigation measures to reduce pelagic longlines bycatch. In Lebanon, the TCNR team has been working on measures to minimize the impact of fisheries in those areas close to the turtle nesting site and PINR*¹⁷ rangers control the island and their surrounding marine and coastal areas in collaboration with the army with the aim of identifying fishermen catching marine turtles.
32. Main difficulties for implementation: lack of knowledge on the existence of sea turtles key areas. The enforcement of fishing law, where existent, is weak.
33. Recommendations: promotion of research projects aiming at identifying and collecting data on the presence of sea turtles key areas. Provide technical and financial support and human capacities to deal with illegal fishing (Bosnia-Herzegovina).

b. Modification of gear, methods and strategies

Measure to be implemented by SPA/RAC and Partners.

A.4 Other Measures to Minimize individual Mortality

a. Setting up and/or improving operation of Rescue Centers

34. State of implementation: apart from a new Rescue Center in Albania and a First Aid in Lebanon, no new rescue centers have been set up recently in the Mediterranean. The Albanian Rescue Center has

*Palm Island National Reserve

been set up in the Rradhima visitor center of the Marine National Park of Karaburun Sazan¹⁸ while the TCNR first aid center (Lebanon) was built in 2015. Algeria, Bosnia Herzegovina, Montenegro and Slovenia do not have rescue centers. Some improvements have been reported by Croatia through the LIFE EUROTURTLE project of 2018 and by Monaco where the setting up of a rescue center for sea turtles within the Oceanographic Museum is ongoing. Countries as Spain and Italy have also developed guidelines to improve the assistance and management of their rescue centers.

35. Main difficulties for implementation: lack of financial resources and technical guidance on how to set up a rescue center.
36. Recommendations: promotion of training courses aimed at increasing knowledge and capacities on where and how to set up a rescue center especially in those areas (Algeria, Bosnia Herzegovina, Montenegro and Slovenia) with no competences in this field.

b. Scientific research and monitoring

37. This is priority no. 2 of the Action Plan, which comprises the following two measures that Contracting Parties must comply with:
 - a) Scientific Research
 - b) Monitoring
38. Each measure foresees a number of specific activities to be implemented by all Parties to the Barcelona Convention. Some of these activities are also directed to partners, stakeholders, NGOs and SPA/RAC itself (see section below on partners and other subjects).

B.1 Scientific Research

a. Identification of new mating, feeding and wintering areas and key migration passages

39. State of implementation: This activity is ongoing in most of the Countries: in Albania, the UNDP project “Improvement of coverage and management of marine and coastal protected areas”¹⁹ is intended to extend the percentage of protected areas in the Albanian territory for the protection of its species, including sea turtles. Croatia and Italy declared that work is ongoing to this purpose while Spain mentioned the organization of a workshop aimed at identifying those areas in 2018. In Lebanon, in particular in Palm Island Natural Reserve (PINR) the identification of nesting areas is regularly undertaken while the TCNR*²⁰ team conduct since 2010 a yearly monitoring of sea turtles to identify the number of nests and eggs in order to protect the nests during this hatching period. In addition, several inventories and assessments were conducted outside the Marine Protected Areas before the reporting period. Algeria, Bosnia - Herzegovina, Turkey, Montenegro, Monaco and Slovenia declared that no activity has been carried out to this aim.

¹⁸ The Rescue Center has been established within the UNDP project on Marine and Coastal Protected Areas, in cooperation with the National Agency of Protected Areas, and the financial support of the AICS (Agency of the Italian Cooperation).

¹⁹http://www.al.undp.org/content/albania/en/home/operations/projects/environment_and_energy/protecting-albania-s-marine-and-coastal-biodiversity-phase-2-.html

²⁰ Tyre Coast Nature Reserve

40. Main difficulties for implementation: lack of regulatory framework, financial resources, administrative management, and technical guidance.
41. Recommendations: promotion of research projects aiming at the identification of sea turtles key areas.

b. Elaboration and execution of cooperative research projects of regional importance aimed at assessing the interaction between turtles and fisheries.

42. State of implementation: in general, research projects aiming at assessing the interaction between turtles and fisheries are not in place at Institutional level. Algeria has mentioned an agreement on the matter with ACCOBAMS. Croatia declared that from 2019, fishermen have the obligation to record and report the bycatch of endangered species, including marine turtles and that best practices for fishermen have been developed to significantly reduce the mortality of turtles incidentally caught. Turkey also declared to have such projects even if no details have been provided on the issue.

Main difficulties for implementation: lack of technical capacities.

c. Tagging and genetic analysis (as appropriate)

43. State of implementation: few data are reported on the implementation of tagging activities. Croatia has developed tagging activities within the NETCET and LIFE EUROTURTLES projects (see section below on projects) while Turkey carries out these activities within special environment protection areas, national parks and Sea turtles nesting areas. In Spain a GPS-tagging Programme on rescue animals is ongoing. Albania and Italy declared that such activities are under development. No data are reported on genetic analysis on sea turtles.

Main difficulties for implementation: lack of regulatory framework, financial resources, administrative management, and technical guidance.

d. Facilitate the networking between managed and monitored nesting sites, aiming at the exchange of information and experience

Measure to be implemented by SPA/RAC.

B.2 Monitoring

a. Guidelines for long-term monitoring programs for nesting beaches and standardization of monitoring methods

Achieved by SPA/RAC

b. Setting up and/or improving long-term monitoring programmes for nesting beaches, feeding and wintering areas

44. State of implementation: not all Parties have established monitoring programmes for nesting, feeding and wintering areas so far. The elaboration of such programmes is under development in Croatia where the setting up of a long-term monitoring programme for assessing the conservation *status* of marine turtles according to Habitats Directive is planned through the ESI funded 2018 project “Establishment of the national species and habitats conservation status monitoring system”.

In Spain, the Ministry for the Ecological Transition is nowadays implementing a contract for the management of nesting areas and for increasing public awareness and scientific knowledge on marine turtles. The program will include GPS-tagging of some animals every year. Also in Italy, the monitoring of the abundance and distribution at sea of sea turtles is under development within the framework of the MSFD monitoring programs. Further, monitoring programs will be launched in the context of the Art.17 of the Habitats Directive (92/43/CEE).

45. Main difficulties for implementation: lack of regulatory framework, financial resources, administrative management, and technical guidance. In particular, in some Countries as Bosnia Herzegovina no research activities aiming at identifying and assessing the distribution of sea turtles populations have been carried out thus impeding the development of any monitoring programs.

a. Elaboration of protocol for data collection on stranding

To be update by SPA/RAC.

b. Setting up stranding networks

46. State of implementation: Parties have provided no information on this activity in the online report. Yet, stranded networks generally exist in most of the Mediterranean Countries but they act locally, in a geographically limited area and therefore most of the national territory remains not monitored. Further, in some Countries the existing networks are more than one and do not have any relation between each other.

47. Recommendations: the network of each Country should be strengthened by creating and increasing the number of local observation centers to be placed in any strategic point along the coast and not only within MPAs or National Parks. All the Mediterranean coastline should be covered and monitored. Each network should have a coordination structure for the monitoring of all rescuing activities occurring in the National territory. The structure should be equipped with a database system to be considered as the unique main point of reference at National level²¹.

c. Standardization of methodologies to estimate demographic parameters for population dynamics analysis, such as population modeling.

Achieved by SPA/RAC

C. PUBLIC AWARENESS AND EDUCATION

48. This is priority no. 3 of the Action Plan and refers to the promotion and implementation of public awareness programmes and information campaigns directed to fishermen, local residents, tourists and

²¹ Assessment of the available data to propose GES Targets and Targets for IMAP CI 24 (SPA/RAC 2018).

tourism related organizations, visitors, decision makers and stakeholders on sea turtles conservation measures.

State of implementation: no information on this activity has been provided from the Parties that have answered to the questionnaire. Detailed information of programmes and campaigns can be found in the section below on partners, stakeholders and NGOs.

D. CAPACITY BUILDING

Activity to be implemented by SPA RAC.

E. NATIONAL ACTION PLANS

49. This is priority no. 5 of the Action Plan and refers to the development of National instruments (action plans) on the conservation of sea turtles and their key habitats.

State of implementation: no information on this activity has been provided by Parties through the questionnaires. Yet, at the 11th and 12th Meetings of the Focal Points for SPAs, Countries as Libya, Syria and Egypt have expressed their strong commitment to the elaboration of a National Action Plan for the conservation of sea turtles and have asked for the logistic and technical support of SPA RAC²².

IV. ASSESSMENT OF THE ACTIVITIES UNDERTAKEN BY THE ACTION PLAN PARTNERS TO IMPLEMENT THE ACTION PLAN

50. Below is presented an analysis of the state of play with respect to the implementation of some specific priorities and activities of the Action Plan on marine turtles carried out by some Action Plan partners. The analysis is based on information and data provided by those partners in the questionnaire mentioned above and presented in Annex III.

Besides the said partners, non-governmental organizations, experts and researchers of universities and research centers working for sea turtles conservation have also contributed by answering to the said questionnaire. Their information has been also considered in the analysis below. A list of all partners and subjects involved and of the projects mentioned can be found in Annex II.

A. PROTECTION AND MANAGEMENT

51. Priority A of the Action Plan is mainly directed to UNEP/MAP Contracting Parties, considering that legislative measures can only be established at governmental level. Yet, activities carried out by partners and other entities can be a relevant contribution to this purpose and, therefore, partners have been asked whether specific methods are applied to limit the mortality of marine turtles caused especially by fishing tools.
52. In this context, ARCHELON, within the LIFE EUROTURTLES Project, is planning to test and supply long-liners equipped with special tool - line cutter allowing fishermen to cut the line close to the mouth of a captured turtle without bringing it onboard, while MEDASSET, within the project "Healthy Seas - a journey from waste to wear", has organized the removal and upcycling of ghost nets, in Greece,

²² See Reports of 11th and 12th Meetings of Focal Points for SPAs.

through diving actions and by collecting discarded fishnets from fishermen and fishfarm. DEKAMER, in Turkey, has been testing boat propeller shields, TED attempts and LED lights applied to set nets to minimize injuries to marine turtles.

53. Most of the actions carried out by the Action Plan partners and NGOs to limit the mortality of sea turtles are based on the establishment of relations with the local fishermen associations. Useful documents containing best practices in the field are distributed, training and awareness raising campaigns as well as workshops are organized for all relevant stakeholders (OTMFM, IAMC-CNR Sardinia, Archipelagos Institute). In particular, in France (OTMFM) and in Italy (IAMC-CNR-Sardinia), the mortality of stranded turtles has been limited through the improving of the current rescue centers hosting injured sea turtles. In the South of Lebanon, in TCNR, a “First Aid” for sea turtles was set up in collaboration with SPA/RAC.

B. SCIENTIFIC RESEARCH AND MONITORING

54. This priority can highly benefit from the activities of the Action Plan partners and all relevant subjects involved in the field of sea turtles conservation. Several questions have been made to identify, in particular, projects and strategies in the Mediterranean Region on:
- Interaction between marine turtles and fisheries;
 - Identification of new nesting, feeding, wintering and migration areas;
 - long-term monitoring of nesting, feeding and wintering areas;
 - stranded sea turtles networks and collection of data on stranded sea turtles.

Participation in collaborative research projects, of Regional importance, for the evaluation of the interaction between marine turtles and fishery.

55. ARCHELON, with LIFE EUROTURTLE project, MEDASSET, through the Bycatch project “Understanding Mediterranean multi-taxa bycatch of vulnerable species and testing mitigation – a collaborative approach” are involved in such collaborative research projects. The Bycatch project, funded by MAVA Foundation, (September 2017- June 2020) aims, in particular, to support the southern and eastern Mediterranean Contracting Parties to the Barcelona Convention (Morocco, Tunisia and Turkey), to identify and test measures to reduce impact of fisheries on marine mammals, birds, sea turtles and elasmobranchs and develop and implement standardized data collection of bycatch across the Mediterranean. SPA/RAC is involved in the project transversal activities targeting all the beneficiary countries and manages in particular the activities of the project carried out in Tunisia, in collaboration with Association “*Les Amis des Oiseaux*”, Birdlife Partner in Tunisia.
56. MEDASSET is also involved in the “Fishers, Sea turtles and Sharks: Alliance for survival” Project (2018-2019), in cooperation with the Greek NGO iSea, which is funded by the Greek Green Fund. The project aims to study and mitigate impacts of bycatch and ghost-fishing on sea turtle and shark populations in 5 major Greek ports.
57. The *Observatoire des tortues marines de France Metropolitaine* (OTMFM) is involved in the SELPAL project (IFREMER and Fishery AMOP). IFREMER reported about the MSFD/ national monitoring (France) for sea floor litter, including lost fishing gear, and areas at risk. The *Centre d'étude et de Sauvegarde de Tortues Marines de la Méditerranée* (CESTMED), belonging to the OTMFM network, was a partner, from 2015 to 2017, of the pilot project ACCOBAMS-FAO-GFCM it aimed to mitigate interactions between endangered marine species and fishing activities. At local level, the project contributed to the identification of the interactions between fisheries and recycling debris.

58. From 2014 to 2015 the INSTM (Tunisia) participated to the ACCOBAMS project aimed to the enhancement of stranding network.
59. Tyr Coast Natural Reserve (Lebanon) is involved in the project “Sustainable Fisheries Management for Improved Livelihood of the coastal Fishing Community in Tyre Coast, South Lebanon” (Drosos Foundation-IUCN-ADR) and in the MedMPAnet Project (SPA/RAC) dealing with marine surveys and some assessment regarding the interaction between marine turtles and fishery.
60. In June 2016, MEDASSET released the report “New observations of sea turtle trade in Alexandria, Egypt” based on a survey of the status of illegal sea turtle trade. It involved semi-structured interviews with fishermen, fishmonger, artifact sellers and consumers, as well as direct observation at fish markets. The survey also provides insight into interaction between marine turtles and local fisheries.

▪ Involvement in projects aiming at the identification of new nesting, feeding, wintering and migration areas

61. The ongoing projects are mainly focused on the identification of new nesting areas. WWF-Greece, ARCHELON, MEDASSET and DEKAMER are all partners of the MAVA project “Conservation of Marine Turtles in the Mediterranean Region” coordinated by SPA/RAC aims at ensuring that the most important nesting sites are well-managed, especially those that are poorly protected, also by reinforcing regional coordination among partners. Within this context, DEKAMER is monitoring sporadic nesting sites and conducting satellite tagging in Turkey while MEDASSET is monitoring sporadic nesting and at the same time assessing potentially suitable nesting sites in Albania. Within this project, the National Institute of Agronomy (INA Alger) is involved in the identification of new nesting sites using a high definition aerial photographs and assessment of beach quality for nesting. While the Cairo University (Egypt) is involved in the establishment of monitoring networks tools as well as the implementation of a sustainable management plan for marine turtles and their habitats.
62. WWF-Greece, in order to assess the state of conservation of *Caretta caretta* nesting sites, developed a standardized protocol with which the status of 100 different sites and additional areas have been visited and evaluated. Further, WWF-Greece is developing a mobile app (BLUESPACES) to gather information on the basic physical characteristics of the beach as, in particular, the presence of marine turtles and the activities carried out on the beach itself. OTMFM has been identifying key sea turtles habitats through telemetry and genetics in partnership with IFREMER-SELPAL through a project funded by TOTAL. Further, CESTMed, which belongs to OTMFM network, conducts seasonal surveys in France with beach visual surveys and sniffing dogs and assess data from the stranding network.
63. Seasonal surveys are also organized by the Archipelagos Institute in the eastern Egean Sea. IAMC-CNR, within the “Sardinian Regional Network for Conservation of Marine Turtles“ is involved in the protection of sporadic nests and in the mapping of potential feeding areas with the use of data logger.
64. In 2012, Tyr Coast Natural Reserve promoted the project “ Satellite Tracking of *Caretta caretta* and *Chelonia mydas* in Southern Lebanon to assess the movements of sea turtles populating the area”. The project was funded by SPA/RAC within the implementation of the Mediterranean Marine Turtle Action Plan.

▪ Involvement in long-term monitoring programs on nesting, feeding and wintering areas

65. Long-term monitoring programs on nesting and feeding areas are carried out in Greece by the Sea Turtle Protection Society of Greece (ARCHELON) and in the eastern Aegean by the Archipelagos Institute with seasonal surveys. Further, since 1994, WWF Greece focuses its fieldwork and scientific

research in Sekania beach, Zakynthos and has compiled a specific Management Plan (MP) that has been approved and is being implemented by the Management Agency of the Natural Marine Park of Zakynthos (NMPZ). WWF Greece, during the nesting period, monitors the area and takes actions to stop illegal and destructive activities.

66. Monitoring is carried out by IAMC-CN, in Sardinia (Italy) through the “Regional Network for Conservation of Turtles” and by DEKAMER, in Turkey, through MAVA project.
67. Within the MAVA funded project “ Conservation of marine turtles in the Mediterranean “, under the coordination of SPA RAC, a nesting monitoring programme for Kuriat Island (2017-2019) is implemented by the NGO “Notre Grand Bleu, APAL and INSTM”. In Egypt, from the end of 2018, a monitoring programme for the identification of nesting and feeding areas along the Egyptian Mediterranean Coast is ongoing. In Lebanon the rangers of the Tyre Coast Natural Reserve monitor the nesting sites of the beaches under their competence.
68. MEDASSET carries out long-term conservation monitoring programs in the nesting sites of Turkey, Greece and Cyprus to assess the quality and status of the conservation and management measures in place and submit reports to international Multilateral Environmental Agreements (MEAs) and national authorities²³.

- Adoption of National guidelines for the monitoring of nesting areas

69. Greece (ARCHELON, MEDASSET, Archipelagos Institute), Italy (IAMC-CNR Sardinia) and Turkey (DEKAMER) have all reported to follow guidelines for the monitoring of nesting areas without specifying whether these guidelines have been adopted at National level. WWF-Greece, uses, instead, as reference Art. 17 of Habitat Directive²⁴ (92/43/ECC). In the specific case of Zakynthos, the NMPZ due to lack of existing guidelines, compiles every year an action plan, which includes the monitoring activities. University of Cairo – Faculty of Agriculture, Genetic, Engineering Research Center, reported about the ongoing work in Egypt on the definition of National guidelines. For the moment being, the guidelines for the long term monitoring programme for marine turtles nesting beaches and standardized monitoring methods for nesting beaches, which were adopted by the 13th meeting of the Focal Points for SPAs in 2017, are used as well as the “Minimum Data Standards for Sea Turtle Nesting beach Monitoring (published by SWOT). Lebanon does not have National guidelines and the nesting monitoring protocol contained in the management plan of the Reserve is applied yearly.
70. A monitoring method is applied in Tunisia but no more information has been provided on the subject. France do not have National guidelines considering that nesting is occasional along its coasts. Algeria does not apply National guidelines either.

- Participation in stranded networks and adoption of National protocols for the collection of data on stranded sea turtles

71. ARCHELON, DEKAMER, IAMC-CNR Sardinia, INSTM, MEDASSET and OTMFM are all part of stranded networks at national levels and apply their protocol for the collection of data on stranded turtles. A national Protocol for the collection of data on stranded sea turtles is under development in Lebanon. In Greece, Archipelagos is not part of the official national stranding network but applies International protocols and collaborate with Port Authorities all around Greece to keep the record of strandings. WWF- Greece transmits all relevant information to ARCHELON and to the relevant port authorities (in the case of Zakynthos, the National Marine Park is also informed).

²³ www.medasset.org/publication/technical-reports-position-papers-policy-recommendations.

²⁴ http://bd.eionet.europa.eu/activities/Natura2000/reference_portal

72. Research Institutes in Algeria and Egypt reported about the lack of national networks. Yet, in Algeria, an initiative between scientists, as part of a doctoral study, was created for the monitoring of strandings. In Egypt, the Egyptian Environmental Affair Agency (EEAA) informs the Cairo Faculty of Agriculture Genetic Engineering Research Center about stranded cases in the territory. Where possible, the researchers of Cairo University conduct necropsies and take samples of sea turtles for genetic analyses.

- Adoption of standardized methodologies for population dynamic analysis

73. Standardized methodologies for population dynamic analysis are applied by ARCHELON, the Archipelago Institute, DEKAMER and MEDASSET. The remaining partners and NGOs do not apply any standardized methodologies for population dynamic analysis.

C. PUBLIC AWARENESS AND EDUCATION

- Development of awareness raising campaigns targeted, in particular, to local population and fishermen

74. The Action Plan partners and almost all organizations and researchers involved develop environmental activities for local populations, including local fishermen. In particular, DEKAMER has developed a programme for fishermen on how to handle turtles on boats. INSTM has organized 5 awareness raising days in the framework of the ACCOBAMS project for the enhancement of stranding networks. Cairo University has carried out workshops and meeting along the Egyptian Mediterranean coast (Port Said, Damietta, Burullus, Alexandria, Marsa Matrouh and EL Salum). Awareness has been raised around TCNR for visitors, schools, universities, but fishermen are still not directly targeted.

75. In the framework of Bycatch project, which include advocacy/lobbying activities directed to Mediterranean decision makers (Morocco, Tunisia and Turkey), communication campaigns to build political awareness on the impact of fishing and bycatch on the marine environment are foreseen beyond 2020. Lastly, under the communication strategy, 5 National Photo exhibitions are planned in 5 different countries, involving also local photographers travelling with fishermen and thus contributing with the engagement and awareness raising of the fishing community.

76. Within the project “Conservation of Marine Turtles in the Mediterranean region” MEDASSET will launch an awareness raising campaign on illegal trade in Egypt, targeting fishermen among others. MEDASSET has also organized a number of awareness campaigns to encourage Greek audience to protect marine life and to participate actively in reducing marine pollution (“Clean Sea: Swear to care”, “You See the Difference. A Turtle Does Not”, “Healthy-Seas-a journey from waste to wear” and “Team Turtle”, an educational game (on line) for primary school-age children.

77. WWF-Greece participates actively in the campaign “Protecting the nature of beauty”, developed by the WWF European Police Office with the aim to highlight the importance of the EU Habitat Directive 92/43EEC. During the nesting season this NGO posts issues relevant to conservation of the loggerhead turtle in Sekania, Zakynthos, and in July 2018 it ran the fundraising campaign “*Caretta Guardian*” to improve the conservation of *Caretta caretta* in Sekania beach in Zakynthos islands. Unfortunately, the campaign stopped due to the devastating fire in Greece. Finally, another local awareness campaign linked indirectly to the conservation of sea turtles was developed during the 2018 nesting period with the aim to decrease the use of plastic straw in the touristic areas of Zakynthos island.

D. CAPACITY BUILDING

▪ Organization of training courses on marine turtle conservation

78. In June 2018, the “Regional Sea Turtle Training Workshop” organized by the SPA/RAC, in the framework of MAVA Marine Turtles Projects, was held in DEKAMER. In July 2018, the TCNR hosted a “National training on monitoring techniques on marine turtles” organized in the context of the EcAp-MED II and MAVA Marine Turtle Projects. A training in Egypt in Ashtoum El-gamil PA, Burullus PA and Marsa Matrouh was subsequently organized with the same purpose. INSTM contributed to the organization of three training courses on marine turtles and cetaceans conservations in the framework of the national stranding network and, at international level, for the implementation of techniques of necropsy within the project INDICIT (1-2 November 2018).
79. ARCHELON and the Archipelagos Institute host, every year, volunteers and students from around the world that are involved in sea turtles conservation, monitoring methodology and stranding response; OTMFM organizes training courses for the stranding network observers, allowing them to have a permit for working on protected species.
80. MEDASSET provides capacity building in the framework of its Projects. Within the MAVA Marine Turtles project, a team in Albania was trained to monitor sporadic nesting areas and to use drone technology for the assessment of potentially suitable nesting sites. Within the number of projects on the interaction between marine turtles and fisheries MEDASSET includes workshops and capacity building, in collaboration with the fisheries sector (“Fishers, Sea Turtles and Sharks: Alliance for survival”, “Healthy Seas”, “Bycatch project”). In particular, in the framework of “Healthy Seas” initiative, in partnership with Enaleia (the first school for professional fishermen in Greece), workshops targeting fishermen and port authorities in four Greek islands (2017, project funded by A.C. Laskaridis Charitable Foundation) were organized. Within the “Bycatch project” and in the framework of collecting/monitoring/observing data on bycatch, three trainings have been organized in Morocco, Tunisia and Turkey and information material has been created as a reference for the fishery-dependent data collection. Training workshops to engage local stakeholders and fishermen will be organized in 2019.

V. FINAL CONSIDERATIONS

81. Over the last years, literature and studies on sea turtles have significantly increased also thanks to the development of a relevant number of International and Regional projects on sea turtles conservation and protection. Yet, the knowledge acquired so far on the matter is still not sufficient to foresee the future viability of these species in the Mediterranean (UNEP(DEP)/MED IG.23/Inf.10/rev.1). In the majority of the Countries of the Mediterranean region, sea turtles protection is guaranteed by International Conventions and Agreements. At National level, such protection is assured through wider laws, regulations or decrees on nature and species protection. With respect to the past, progress have been made in Albania, which has a National Red List containing sea turtles, and Algeria, which is working on the development of a National list of the threatened plant and animal species in its waters, even with relevant technical and financial difficulties.
82. In Bosnia-Herzegovina and Montenegro legal protection for the endangered or threatened marine species, including sea turtles, is absent due to the fact that research studies on their presence have

never been carried out so far. In Bosnia-Herzegovina, Neum-Klek Bay and Mali Ston Bay are the only areas opening to the sea and thus candidate for the future first Marine Protected Area in the Country. Within this context, it would be desirable to promote research projects aiming at identifying the presence of local marine species, including sea turtles, also through interviews to local fishermen, thus helping the development of effective conservation measures. Similarly, in Montenegro, studies and analysis on the presence of sea turtles must be encouraged in the marine and coastal area.

Legislation on deliberate killing must be updated in some Countries as Turkey and Lebanon and developed in others totally lacking these measures as Algeria, Bosnia-Herzegovina and Montenegro. Such legislation should be also strengthened in those Countries that still today capture illegally sea turtles for commercial purposes. The hidden trade of sea turtles, indeed, persists in Egypt (Boura et al. 2016) while in Tunisia, the poaching and illegal trade of sea turtles, that has been observed in recent years, is due to the lack of enforcement of the existing legislation (Bradai et al. 2018). To this reference, within the MAVA Marine Turtles Project, national strategies to combat the illegal trade of sea turtles in Tunisia and Egypt has been launched.

83. Not all key sea turtles habitats are managed and protected at the same level, Nesting sites are generally protected if they are included in marine protected areas, but wintering and feeding habitats and key migration passages are not. All current stable nesting sites of both loggerhead and green turtles in the Mediterranean must be sufficiently protected regardless whether they are included in MPAs or not, while further investigations should be promoted, especially in those unexplored sides of the Mediterranean (North Africa and Levantine basin - Middle East) in order to detect new nesting sites, even sporadic, in need of protection (Katselidis et al. 2014).
84. In general, the main difficulty encountered by Parties in the protection of feeding, wintering and migration passages is the lack of scientific research aiming specifically at the identification and recognition of critical habitats for sea turtles. To determine how these areas are distributed throughout the Mediterranean it is essential to get all available information on the distribution of adults and juveniles sea turtles at oceanic and neritic foraging grounds, wintering areas and migration corridors.
85. That implies assimilating all research material on sea turtles (e.g. stranding and bycatch data, satellite tracking, stable isotope, genetic, aerial survey, data logger etc.) (UNEP(DEPI)MED IG.23/Inf.10/revI (2017)). To this regard, in 2017 the MAVA Project was launched to improve protection and management of key sea turtle nesting sites in the context of climate change, by filling gaps of knowledge and protection on this matter. In this context, SPA/RAC and its Partners coordinates the implementation of the project activities, in Albania, Egypt, Greece, Lebanon, Libya, Spain, Tunisia and Occidental Mediterranean Bassin.
86. Fishing regulations specific to sea turtles key areas still do not exist due to the lack of knowledge on their presence in the Mediterranean. In this context, bycatch data are essential to identify which areas are most populated by sea turtles and increase awareness among policy makers to more effective fishing regulations. To this purpose, it is worthy to mention the “Bycatch project”, which aims to develop and implement standardized data collection of bycatch across the Mediterranean.
87. Monitoring programmes for nesting, feeding and wintering areas are developed in few Countries but their implementation is limited. Yet, the long term monitoring of habitats and sea turtles is expected to improve in the coming years in the Mediterranean thanks to IMAP developed within the framework of the EcAp process of the Barcelona Convention as well as the monitoring requirements set under the MSFD of the EU.
88. The collection of stranded sea turtles is at the basis of any monitoring activity of these species. Yet, no information on this activity has been provided by Parties while some information are provided

by the Action Plan partners thus revealing that, even if existent in the territory, the networks for stranded turtles do not always represent a point of reference recognized nationally. Further, in most cases the activities of the networks are limited geographically and are not connected among each others.

89. All the Mediterranean coastline should be covered and monitored and each network should have a coordination structure for the monitoring of all rescuing activities occurring in the National territory. The structure should be equipped with a database system to be considered as the unique main point of reference at National level.

The main function of a Marine Turtles Rescue Center is the rehabilitation and releasing back in the wild of injured sea turtles (Bentivegna, 2003). Through its routinely activity, relevant information on the presence of sea turtles in a specific area is also collected thus helping the identification of hot spot areas with high turtles densities (Bentivegna et al. 2003).

90. In addition to the routine activities, the personnel of these Centers, through necropsy, assess the main causes of sea turtles mortality in the area and collects samples for other analysis, including the marine litter EU funded ingested by sea turtles (Bentivegna et al. 1997). This last task is essential for the implementation of the Marine Litter –MED*²⁵ Project whose ultimate objective is to achieve the Good Environmental Status (GES) of the Mediterranean Sea. Today a limiting factor to the analysis of marine litter ingested by sea turtles in many countries, namely those belonging to the southeast side of the Mediterranean, is the lack of Rescue centers (SPA/RAC report in press).
91. Despite the presence of several Rescue Centers, mainly in the western area of the Mediterranean with even more than one center in the same Country, they do not often use a common methodology and transmit their data to the National Authority. Therefore, it is essential to foresee a major control of these Rescue Centers from local Authority by guaranteeing that these centers have skilled personnel and appropriate equipment and adopt common methodologies for data collection. The promotion of rescue centers in those Mediterranean Countries where these facilities are absent should be strengthened.
92. One of the main difficulties reported by the Parties in the implementation of the measures of the Action Plan is the lack of financial and technical assistance, mainly in the Southern Mediterranean Countries. The number of International and Regional projects on sea turtles conservation (see above the section on partners) has relevantly increased over the last years in order to fill these gaps and collect essential data to be used for the establishment of effective strategies, policies and legal measures in this field. Yet, it is recommended that the existing and expected results of the said projects are mainstreamed in a common framework to avoid any eventual duplication and help their diffusion and knowledge across the whole Mediterranean Community

²⁵ Web Site

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VII. LIST OF ACRONYMS AND ABBREVIATIONS

ACCOBAMS - Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea, and contiguous Atlantic Areas.

AMOP - Association Méditerranéenne des organisations de producteurs

AICS – Italian Agency for Development Cooperation

ARCHELON - The Sea Turtle Protection Society of Greece

AP - Action Plan

CESTMed - Centre d'étude et de Sauvegarde des Tortues Marines de la Méditerranée

COP - Conference of the Parties to the Barcelona Convention

DEKAMER - Sea Turtle Rescue, Research and Rehabilitation Centre (Turkey)

EEAA - Egyptian Environmental Affair Agency

EcAp MED - Ecosystem Approach in the Mediterranean

EO – Ecological Objective

EU – European Union

GFCM - General Fisheries Commission for the Mediterranean

IAMC-CNR - Institute for Coastal Marine Environment (Oristano- Sardinia) of the National Research Council (Italy)

IFREMER - Institut Francais de recherche pour l'exploitations de la mer

IMAP - Integrated Monitoring and Assessment Programme

INA Alger - National Institut of Agronomy

INDICIT - Implementation of indicators of Marine litter on sea turtles and Biota in Regional Sea Conventions and Marine Strategy Framework Directive Areas

IUCN – International Union for Nature Conservation

GES - Good Environment Status

GPS - Global Positioning System

INSTM - Institut National des sciences et technologie de la Mer (Tunis)

MAP - Mediterranean Action Plan

MEA - Multilateral Environmental Agreements

MEDASSET - The Mediterranean Association to save Sea Turtles

MP - Management Plan

MSFD - Marine Strategy Framework Directive

MSP – Maritime Spatial Planning

NGO - Non Governmental Organization

NETCET - Network for the Conservation of Cetaceans and Sea Turtles in the Adriatic

NMPZ - National Marine Park Zakynthos

OTMFM - Observatoire des tortues marines de France Metropolitaine - Muséum National d'Histoire Naturelle

PINR - Palm Island National Reserve (Lebanon)

QSR - Quality Status Report

SAP BIO - Strategic Action Plan on Biodiversity

SELPAL - Sélectivité de la flottille palangrière française ciblant le thon rouge dans le Golfe de Lion

SPA/BD - Specially Protected Areas and Biological Diversity

SPA/RAC - Specially Protected Areas/ Regional Activity Center

TCNR - Tyr Coast Natural Reserve (Lebanon)

UNDP - United Nations Development Programme

UNEP MAP - United Nations Environment Programme – Mediterranean Action Plan

SWOT- State of the World' Sea Turtle

VIII. Table I : Summary of the filled questionnaires received

Action Plan (Activities)	Albania	Algeria	Bosnia Herzegovina	Croatia	Italy	Lebanon	Monaco	Montenegro	Slovenia	Spain	Turkey
A.I. a Protection of turtles -General species protection	Yes	Yes	No	Yes	Yes	Yes	Yes		Yes	Yes	Yes
A.I. b. Enforce legislation to deliberate killing	Yes		No	Yes	N.A	Yes	N.A.		Yes	Yes	Yes
A.I. c. Habitat protection and management (nesting, mating, feeding, wintering and key migration passages)		u.d*	No	Yes	u.d.	No	N.A.	N.A	No	Yes	
A.2. b. Setting up and implementing management plans		No	No	u.d.	No	Yes	No		No	u.d.	Yes
A.2. d. Restoration of damaged nesting habitats		No	No	N.A.	No		N.A.		N.A	No	N.A
A.3. a. Fishing regulations (depth, season, gear) in key areas	Yes	Yes (?)	Yes (?)	No	No		N.A.		N.A	Yes	No
A.3. b.Modification of gear, methods and strategies		Yes (?)	No	No	u.d.	No	No		No	u.d.	u.d.
Partners & Parties											
A.4. a. Setting up and/or improving operation of Rescue Centres	Yes	?	No	Yes	Yes	Yes	Yes		No	Yes	Yes
B.I. a. Identification of new mating, feeding and wintering areas and key migration passages;	u.d.	No	No	u.d.	Yes		N.A.	N.A	No	Yes	No
B.I. b. Elaboration and execution of cooperative research projects of regional importance aimed at assessing the interaction between turtles and fisheries		Yes	No	u.d.	No		No		No	u.d.	Yes
B.I. c. Tagging and genetic analysis (as appropriate)	u.d	No	No	Yes	No	No	No	N.A	No	Yes	Yes

* u.d: under development

IX. LIST OF PARTNERS

MEDASSET - Mediterranean Association To Save Sea Turtles – NGO (Greece)

ARCHELON - The Sea Turtle Protection Society of Greece – NGO (Greece)

INSTM - Institut National Des Sciences Et Technologie De La Mer - Public Research Institute (Tunisia)

INA ALGER SCIENCE AGRONOMIQUE - National Institute of Agronomy (Algeria)

Faculty of Agriculture Genetic Engineering Research Center of CAIRO (Egypt)

IFREMER – Institut Français de recherche pour l’exploitation de la mer - Department of biological resources and environment

OTMFM - Observatoire Des Tortues Marines De France Métropolitaine - Museum National D’histoire Naturelle

ARCHIPELAGOS INSTITUTE OF MARINE CONSERVATION, NGO (Greece)

WWF GREECE, NGO (Greece)

IAMC - Institute for Coastal Marine Environment of The National Research Center of Sardinia (Italy)

TYR COAST NATURAL RESERVE (Lebanon)

DEKAMER- Sea Turtle Rescue, Research and rehabilitation center (Turkey)

X. “EVALUATION QUESTIONNAIRE ON THE IMPLEMENTATION OF THE UNEP/MAP ACTION PLAN FOR THE CONSERVATION OF MARINE TURTLES IN THE MEDITERRANEAN (2014-2019)” (PARTNERS)

Protection and Management

1. Have you undertaken or adopted methods to limit the mortality of marine turtles caused by fishing tools?

Yes

No

If yes, please, specify the type of methods applied:

Scientific Research and monitoring

2. Have you participated in collaborative research projects, of Regional importance, for the evaluation of the interaction between marine turtles and fishery?

Yes

No

Please, specify the type of projects and its objectives:

3. Are you involved in projects aiming at the identification of new nesting, feeding, wintering and migration areas?

Yes

No

Please, specify the type of project and its objectives:

4. Are you involved in long-term monitoring programs on nesting, feeding and wintering areas?

Yes

No

Please, specify:

5. Do you apply National guidelines, where existent, for the monitoring of nesting areas?

Yes

No

If not, specify what monitoring methods are applied:

6. Are you part of a stranded network and apply a National Protocol for the collection of data on stranded sea turtles?

Yes

No

If not, specify the type of measure applied:

7. Have you adopted standardized methodologies for population dynamic analysis?

Yes

No

If not, specify the type of measure applied:

Public Awareness and Education

6. Have you developed awareness raising campaigns targeted, in particular, to local population and fishermen?

Yes

No

If yes, please specify:

Capacity building

1. Have you organized training courses on marine turtles conservation?

Yes

No

If yes, please specify:

Please, add what deemed of relevance, according to your experience, on marine turtles conservation, which is not included in this questionnaire:
