

# GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN COMMISSION GÉNÉRALE DES PÊCHES POUR LA MÉDITERRANÉE



## **ADVISORY COMMITTEE (SAC)**

#### **Sixteenth session**

St Julian's, Malta, 17-20 March 2014

Report of the Working Group on Marine Protected Areas Bar, Montenegro, 3 February 2014

#### **EXECUTIVE SUMMARY**

The creation of a working group on marine protected areas within the framework of the GFCM was envisaged by the thirty-seventh session of the Commission held in Croatia (May 2013); the main objectives of the working group were to: i) review the status of Mediterranean marine protected areas (MPAs); ii) review the status of existing GFCM fisheries restricted areas (FRAs) and assess the strengths, weaknesses, opportunities and threats of this protection tool; iii) review the existing proposal forms for new marine protected areas, such as, FRAs, SPAMIs, and Areas of Special Importance for cetaceans, in order to harmonize requirements and work processes among organizations. The working group recognized the FRA was a valuable tool to be considered at the regional level as it offered some main advantages including: i) a linear and simple process for its establishment, ii) open to different type of stakeholders and iii) easy to be complemented with additional protection measures (to be adopted by other regional competent organizations and national authorities). It was therefore recommended to provide added value to the GFCM FRAs proposing the overlap among different protection layers by: a) designating national MPAs in those areas which fall within national waters and that already overlap with the designated FRA in areas deeper than 1000 m; b) designating fisheries restricted areas in areas already protected by different protection figures. The importance of strengthening the collaboration and cooperation among the relevant intergovernmental organizations was also underlined. The first meeting of the working group on marine protected areas was attended by representatives of regional and international organizations as well as by national experts.

#### OPENING AND ARRANGEMENT OF THE MEETING

- 1. The GFCM Working group on Marine Protected Areas (WGMPA) was held in Bar, Montenegro, on 3 February 2014. The meeting was attended by 29 participants from eight GFCM Members, as well as from ACCOBAMS, OCEANA, IUCN, WWF, MedPAN, UNEP/MAP, RAC/SPA, the FAO fisheries department (FIPI) and Regional Projects together with the GFCM Secretariat (list of participants in Appendix B).
- 2. Mr Abdellah Srour, GFCM Executive Secretary, welcomed participants and recalled the decision taken at the thirty-seventh session of the Commission (Croatia, May 2013) which had led to the establishment of this working group.
- 3. Mr Federico Álvarez, chair of the meeting, also welcomed participants and presented the main objectives of the working group which within the framework of the GFCM aimed at tackling the topics of marine protected areas and fisheries restrictions from the perspective of spatial based fisheries management tools and in the context of both national and international waters.
- 4. The agenda was presented and adopted without amendments (Appendix A). The GFCM Secretariat together with Ms Jessica Sanders, FAO FIPI, ensured the task of rapporteurs of the meeting.

#### CURRENT STATUS OF PROTECTED AREAS IN THE MEDITERRANEAN

5. The status of protection of the Mediterranean Sea and of the main type of protection tools available and implemented by countries were summarized by key international organizations involved in the protection of the Mediterranean Sea.

GFCM Fisheries Restricted Areas (FRAs) (Aurora Nastasi, GFCM Secretariat). The presentation highlighted the role of the GFCM as a regional fisheries management organization (RFMO) having competence over the Mediterranean and Black Sea. Over the last years, issues relating to marine protected areas had been addressed, especially their role as a tool for fisheries management, with the final goals of a) preserving fisheries resources and/or b) minimizing the impact of fishing on specific habitats with a high value from a biological point of view. Regarding the establishment of fisheries restrictions within limited areas, the so-called "fisheries restricted areas" (FRA), placed under the GFCM authority, had the scope of regulating or prohibiting fisheries activities within a certain area. Ms Nastasi explained that four FRAs had been established since 2006 and in order to understand the perception of FRAs and of related recommendations, and to gather information on these areas, the GFCM Secretariat had submitted a questionnaire to its Members asking them to complete it on a voluntary basis. The analysis of the answers had indicated that GFCM Members had little consideration in respect to this protection tool and were not envisaging the possibility of requesting the establishment of new FRAs to the GFCM. With regard to the existing FRAs only Italy and Cyprus seemed to be aware of the implications generated by the establishment of the FRA of Santa Maria di Leuca and of the Eratosthenes Seamount, since it emerged that these countries were willing to protect properly the areas, under the provisions of the GFCM recommendation. On the other hand, the FRA of the Nile Delta was not properly recognized and adequately protected by the neighbouring country. The requirements foreseen by the GFCM recommendation that had established the FRA in the Gulf of had been incorporated in the French fisheries management plans and in data collection and control frameworks; nevertheless the partial data provided by France did not permit to clearly assess whether the fishing effort was kept stable or not in 2012, as foreseen for this area. Information from Spain was not included in this presentation as well as in the first draft of the background document "Status of GFCM Fisheries Restricted Areas" (reproduced in Appendix D) due to time constraints, however it was underlined that this information should be included in the final version of the document that would be published online (www.gfcm.org) in the weeks following the meeting.

6. Oceana's representative welcome this initiative of the GFCM Secretariat to review the status of the FRAs and considered very valuable the information obtained. Furthermore, she pointed out the several incompliance cases occurring within FRAs. The GFCM Secretariat mentioned that the information gathered through the questionnaires would be brought to the attention of the SAC for its consideration and possible action, including, as appropriate, transmission of relevant information to the GFCM Committee of Compliance.

Marine Protected Areas. Global trends and targets with regards to the Mediterranean context (François Simard, IUCN). This presentation reminded the Convention on Biological Diversity (CBD) Aichi target 11<sup>1</sup> and its components. In particular, it reminded the commonly used definition of an MPA within the nature conservation community. It underlined that the current assessment worldwide is that the MPAs cover only barely 3 percent of the surface of the oceans and that reaching 10 percent by 2020 should require a lot of efforts from all interested parties, including the fisheries management organizations. It also recalled that the numbers were not the only objective and that, as strongly discussed during IMPAC3 (Marseille, France, October 2013) and stated in the Ajaccio ministerial message, the management effectiveness, the equitable management, as well as the ecologically representativeness, the connectivity, the other effective area-based conservation measures, and the integration into the wider landscapes and seascapes, were considered also fundamental elements of the target. The importance of conservation beyond national jurisdiction was also emphasized.

7. The working group convened that all organizations should be working together to reach the 2020 Aichi protection targets.

National Marine Protected Areas (MPAs) (Chloë Webster, MedPAN). The contribution by MedPAN underlined that the 10 percent coverage was not the only target to be achieved by 2020 as also the good management of protected sites was fundamental. MedPAN worked on a "Criteria document" for the inclusion or not of various protected sites into the MAPAMED Database (jointly established with RAC/SPA). MAPAMED allowed MedPAN to conduct an analysis of the system of MPAs in the Mediterranean. The MedPAN Criteria document examined fisheries management following the different filters considered for inclusion into the database. The analysis of Mediterranean MPAs identified 677 sites, 161 of which had a juridical national status and 507 of which were declared Natura 2000 sites. The objective of including fisheries restricted areas (outside MPAs) at national and regional level into MAPAMED under a specific layer was recalled. To this aim, GFCM was requested to collect data on national fisheries restricted areas in close coordination with MedPAN by circulating questionnaires.

Can FRAs in territorial waters be considered as MPAs? (Alain Jeudy de Grissac, IUCN). The presentation described the fisheries restricted area declared for banning trawling at depths further than 1000 m, which represented 1.3 million km², covering 53 percent of the 2.5 million km² of the Mediterranean Sea. Inside all territorial waters of the Mediterranean countries, it covered about 7.9 percent. In some of them this FRA highly overlapped with territorial waters (e.g. 31 percent in France, 24 percent in Syria and 23 percent in Lebanon). Furthermore, according to the FAO GFCM definition of fisheries restricted area "A Geographically defined area in which all or certain fishing activities are temporarily or permanently banned or restricted in order to improve the exploitation and conservation of harvested living aquatic resources or the protection of marine ecosystems", and to the IUCN definition of a MPA "A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values", it was evident that there were strong similarities, in particular concerning the objective of conservation and sustainable use of natural resources. While looking at the tolerance of IUCN for the different MPAs management categories concerning fisheries

-

<sup>&</sup>lt;sup>1</sup> Aichi Biodiversity Targets of the Convention on Biological Diversity (CBD); Target 11: By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider land-scape and seascapes (http://www.cbd.int/sp/targets/).

and aquaculture activities and other human activities, it appeared that FRAs in territorial waters could be considered and declared as MPAs with the management shared between the different relevant ministries. Therefore, it was suggested that declaring the below 1000 m FRA sites as MPAs could be a strong advantage to ensure the coherence of the network of MPAs for deep sea ecosystems and fulfil the CBD commitment to declare 10 percent of the Mediterranean waters as MPAs by 2020.

Areas of special importance for cetaceans (Florence Descroix-Comanducci and Chedly Rais, ACCOBAMS). The presentation recalled that ACCOBAMS (Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area) comes from a joint initiative of four Conventions: the CMS Convention for Migratory Species, the Barcelona Convention, the Bern Convention and the Bucharest Convention - covering all maritime waters of the Black Sea and the Mediterranean Sea and the Atlantic area contiguous to the Mediterranean Sea bounded to the West by the line joining the lighthouses of Cape St. Vicente (Portugal) and Casablanca (Morocco). In 2010, The Parties agreed to extend the geographical scope of ACCOBAMS to cover also the entire maritime waters of Spain and Portugal. ACCOBAMS aims at achieving and maintaining a favorable conservation status for cetaceans, including by creating and maintaining a network of specially protected areas that ensures the conservation of cetacean habitats. To this end the scientific committee of ACCOBAMS identified areas of importance for cetaceans in the zones covered by the agreement. These areas were selected on the basis of the available knowledge on critical habitat for cetacean and on the occurrence of significant interactions between cetaceans and human activities. The ACCOBAMS representatives at the meeting presented the identified areas and the criteria used for their selection. They also introduced the guidelines for the Establishment and Management of MPAs for Cetaceans and the Cetacean Manual for MPA managers produced by ACCOBAMS jointly with RAC/SPA and MedPAN.

Status of Pelagos Sanctuary (H.E. Patrick Van Klaveren). The presentation introduced the Pelagos Sanctuary that was born from an international agreement between France, Italy and the Principality of Monaco signed in 1999 (entered into force in 2002) and dedicated to insure a favourable conservation status of marine mammals by protecting them and their habitat from direct and indirect negative impacts of anthropogenic activities. With about 87500 km², most of which lied in high Seas, Pelagos Sanctuary had been registered as a Special Protected Area of Mediterranean Importance (SPAMI) with 236 neighbouring municipalities. Research field and actions related to capacity building and public awareness were implemented by management bodies (Parties, Technical and Scientific Committee, Permanent Secretariat and Working Groups), in compliance with a management plan under updating. As a pilot area from ACCOBAMS, Pelagos Sanctuary always regulated social and economic activities with a cooperative and participative policy.

8. The working group proposed the GFCM should regulate specific fisheries activities in the Pelagos Sanctuary (Italy, France, Monaco) which could have negative impacts on cetaceans, possibly through the designation of a new fisheries restricted area within this large international SPAMI.

## STATE OF PLAY AND CURRENT PROCESSES TO IDENTIFY POTENTIAL AREAS TO BE PROTECTED

9. The areas identified as a priority that deserved specific protection measures together with protection gaps and opportunities for the Mediterranean Sea were reviewed and discussed.

Setting Priorities for Regional Conservation Planning in the Mediterranean Sea (Pilar Hernández, GFCM Secretariat). The presentation summarized the main outcomes of the paper from Micheli  $et\ al^2$  (2013) which identified in particular priority conservation areas that represented the

<sup>&</sup>lt;sup>2</sup> Micheli F, Levin N, Giakoumi S, Katsanevakis S, Abdulla A, et al. (2013) Setting Priorities for Regional Conservation Planning in the Mediterranean Sea. PLoS ONE 8(4): e59038. doi:10.1371/journal.pone.0059038

current consensus among the different initiatives. A review of six existing and twelve proposed conservation initiatives highlighted gaps in conservation and management planning, particularly in the southern and eastern regions of the Mediterranean and in offshore and deep sea habitats. The study also identified ten areas, encompassing 10 percent of the Mediterranean Sea, that were consistently identified among the existing international organizations and that according to the authors represented top priorities for immediate conservation action.

- 10. Some participants expressed some reserves with respect to the results of the mentioned paper that was considered to present some inaccuracies; for instance the most recent information from certain Mediterranean areas was not taken into consideration, and also, the methods and conclusions of this study were essentially the results of an official methodology and process previously undertaken by the Parties to the Barcelona Convention and their Partners. However, the GFCM Secretariat indicated that this paper was presented just as an example of a methodology which could be used to meet the consensus when deciding on geographical areas where to focus protection goals more than to highlight the results.
- 11. MPAs in the Mediterranean Sea: addressing opportunities to face the protection gap (Pilar Marin, OCEANA). This presentation highlighted the existing tools ready to be used for new protected areas designation under GFCM and UNEP/MAP. It was also stressed the alarming situation from the last stocks assessments – which had worsened over the time – and the insufficiency of the existing MPA networks. Several UN initiatives had been launched during the last decade to remedy this situation, such as the CBD commitment to reach a 10 percent of marine surface protected by 2020<sup>1</sup> and also the need to establish conservation measures to avoid impact on vulnerable marine ecosystems (VMEs) as defined by FAO<sup>5</sup>. However, up to date the implementation of the mentioned initiatives was considered pretty weak at national and international level. In order to contribute to addressing the current protection gap, particularly in offshore areas, Oceana launched the MedNet<sup>3</sup> proposal in 2011. The proposal drawn one hundred of well-distributed and well-connected sites and includes many different features as carbonate mounds, cold seeps, escarpments, gyres or abyssal plains. The potential occurrence of VMEs, commercial species and ecologically significant species and habitats were also taken into account. The core of the proposal was represented by seamounts and submarine canyons, both of them considered as key features by CBD<sup>4</sup> and FAO<sup>5</sup>. Given that UN bodies were aligned in their requirements regarding the conservation of resources, it was considered that the MedNet seamounts and submarine canyons coincident with Mediterranean EBSAs offered a real opportunity to contribute to increasing the protection in the Mediterranean Sea by using FRAs and/or open sea SPAMI designations.
- 12. The presentation by OCEANA detected several areas also in the high seas that should deserve special protection and which could be part of a coherent network of protected areas. It was underlined that the current forms for GFCM Fisheries Restricted Areas required exhaustive information which was not always available for pelagic and deep seas habitats, also considering the cost of scientific campaigns in the deep seas. It was therefore suggested that in these delicate areas, and on a case by case basis, a more precautionary approach less restrictive in terms of scientific data could be applied.

Multi-sector participatory planning to achieve effective MPAs and MPA networks (Marina Gomei, WWF). The presentation focused on the enabling conditions that underpin to creation of effective MPA, including in MPAs in open sea. Administrative, social and economic considerations should be taken into account to address the challenges of managing remote areas. The engagement of stakeholders was thus considered one the most important component of the design, planning, and establish of new MPAs. WWF, as a global network, had extensive experience of engaging

\_

<sup>&</sup>lt;sup>3</sup> Marín, P., Aguilar, R., García, S. 2011. Oceana MedNet: MPA Network Proposal for the Mediterranean Sea. 100 reasons to reach 10%. OCEANA http://oceana.org/sites/default/files/reports/OCEANA\_MEDNet\_ING\_16012012\_0.pdf

<sup>&</sup>lt;sup>4</sup> UNEP. 2007. Report on the expert workshop on ecological criteria and biogeographic classification system for marine areas in need of protection. UNEP/CBD/EWS.MPA/1/2. URL: <a href="http://www.cbd.int/doc/meetings/mar/ewsebm-01/official/ewsebm-01-02-en.pdf">http://www.cbd.int/doc/meetings/mar/ewsebm-01/official/ewsebm-01-02-en.pdf</a>
<sup>5</sup> FAO. 2009. International Guidelines for the Management of Deep-sea Fisheries in the High Seas. FAO, Rome, Italy, 73pp. <a href="http://www.fao.org/docrep/011/i0816t/i0816t00.htm">http://www.fao.org/docrep/011/i0816t/i0816t00.htm</a>

stakeholders to successful develop MPAs in different ecosystems and across several marine regions. WWF worked with the public, industry and other stakeholders to build their capacity to engage more effectively with marine governance and marine planning initiatives, and to develop science-based solutions to cross-cutting environmental and governance challenges that cannot be solved by one single sector. Lessons learned from stakeholder engagement were presented from three WWF working areas. 1) In Mediterranean coastal MPAs, new regulation of marine activities were developed with the active engagement of all level of stakeholders, including resource users (such as fishers and divers), local and national administrations, universities, and NGOs. At the end of the participatory process, the authorities endorsed a new plan in 6 MPAs, the buy-in from local communities and stakeholders (including fishers) was secured, and ownership of the MPA increased at local and national level. 2) In the transnational waters, an international partnership was used as innovative process to bring together the major sectors from UK, France, Ireland and Spain operating in the Celtic Sea to find a way to manage marine activities more sustainably (PISCES project). A combination of capacity building activities and participatory working groups allowed representatives to agree on a roadmap for the implementation of the Marine Strategy Framework Directive, including the identification of new MPAs. 3) WWF in the Baltic Sea represented an active and highly influential force in the efforts of applying an integrating management planning of the use of the sea. In particular, in the BaltSeaPlan Project, WWF contributed to the multi-stakeholder marine spatial planning process by developing a decision making tool (Marxan with zones) to identify fisheries suitable areas.

13. In light of the contributions presented and the discussion held, the working group was invited to develop a brief analysis of the main protection tools and institutional/legal frameworks which had been guiding the establishment of marine protected areas in national well as in international waters, also by detecting the main current strengths, weaknesses, opportunities and threats (SWOT analysis). The information gathered through this exercise is reported in Appendix C of this report.

# DISCUSSION ON POSSIBILITIES OF HARMONIZING REQUIREMENTS AND WORK PROCESSES AMONG ORGANIZATIONS

- 14. The chair presented a brief review of the information requested by the standard forms of GFCM, ACCOBAMS, and RAC/SPA to propose respectively FRAs, areas of special importance for cetaceans, and SPAMIs. He brought to the fore the fact that the three forms requested the very same type of information. Regarding fisheries activities, generic and very low level of disaggregated data were requested. He therefore proposed to homogenize this type of information in order to compile one single form which could be used to apply for the three types of protection for the same area, thus making the exchange of information easier.
- 15. In light of this evidence, the working group agreed to advice harmonizing the three existing forms to request the designation of different protection measures to GFCM, ACCOBAMS, and UNEP/MAP so that the forms would request the same type of information regarding fishing activities and related socio-economics aspects.
- 16. ACCOBAMS, GFCM and UNEP/MAP representatives informed the meeting that the proposed unified form should be prepared and presented to Contracting Parties of each organization for the final endorsement and adoption within the respective relevant body.

Operational Criteria for identifying SPAMIs in areas of open seas, including the deep sea (Daniel Cebrian, UNEP-MAP RAC-SPA). The presentation summarized the process which had led to the definition of common operational criteria for selecting open seas, including deep seas sites that could be included in the SPAMI List. With this objective, RAC/SPA had taken into account other ecological criteria, such as those adopted in 2008 by the CBD to identify ecologically or biologically significant areas (EBSA) and those adopted by the GFCM for establishing fisheries restricted areas. The four sets of operational criteria that were defined through this process had enabled the Parties to the Barcelona Convention to identify twelve priority conservation areas in the Mediterranean. It had

also been envisaged that the strengthened cooperation between GFCM and UNEP/MAP-RAC/SPA could start the process of assisting respective Parties for harmonized protection of the most appropriate zones within these areas.

Legal issues and SPAMIs (Tullio Scovazzi, University of Milano Bicocca and UNEP/MAP consultant). Mr Scovazzi pointed out that the objective should not be to achieve a unique model of Mediterranean MPA, but to establish ways of coordination and complementarity between institutions having different but fully compatible and complementary objectives while keeping their specificities (such as UNEP-MAP for SPAMIs and GFCM for FRAs). For example, the GFCM should be involved if measures relating fisheries had to be adopted within a SPAMI, and UNEP-MAP should be involved if it was considered appropriate to adopt for a FRA the broader protection framework that is typical of a SPAMI. The first important step on the way of co-operation was achieved in 2012 with a GFCM-UNEP-MAP memorandum of understanding and other forms of cooperation could be envisaged. On the question of definition of an MPA, it was suggested that it should be as broad and simple as possible to include different kinds of Mediterranean MPAs, such as SPAMIs, FRAs and particularly sensitive sea areas under the IMO regime (a good model was based on the definition given by Art. 2 of the Convention on Biological Diversity). When legal action was required, it would be better to avoid the terms "open seas" and "deep sea", ecological terms which have no legal meaning and could determine objections, and to use a terminology more consistent with the complex legal conditions of the Mediterranean Sea.

# PLANNING OF A STUDY FOR THE IDENTIFICATION OF POTENTIAL AREAS TO BE PROTECTED BY COMBINING MORE THAN ONE MEASURE (e.g. SPAMI-FRA)

State of progress of the joint action with the EC to promote the establishment of SPAMIs in open seas, including deep seas, and third phase steps (Daniel Cebrian, UNEP/MAP-RAC/SPA). The presentation introduced the MedOpenSeas project (funded by the European Commission) which had been contributing since 2008 to supporting the establishment of a representative network of MPAs embracing the open sea, including areas beyond national jurisdiction, as mandated by several international decisions including the World Summit on Sustainable Development (2002) and the Aichi Targets (CBD X/2, 2010). The overall project aim was to facilitate the establishment of open seas MPAs, including deep seas in the Mediterranean, through spatial mapping, legal analyses and stakeholder negotiation. The Barcelona Convention and its Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA/BD) provided a suitable legal and institutional framework for the development of MPAs in the high seas as well as national waters, and thus RAC/SPA (Regional Activity Centre for Specially Protected Areas) had been implementing the project since the beginning.

17. It was underlined that the development of MPAs in areas beyond national jurisdiction was a challenging task, and thus close collaboration between key agencies with a mandate to manage marine biodiversity and resources was a core part of the third phase of the project. A joint strategy between ACCOBAMS under the Convention on Migratory Species (CMS), GFCM, IUCN and RAC/SPA for addressing the future management of three priority sites had been planned in the project and coordination meetings were envisaged with this purpose.

#### **ANY OTHER MATTER**

18. The Executive Secretary of ACCOBAMS informed the meeting about the ACCOBAMS Workshop on MPAs that would be organized in collaboration with MedPAN and RAC/SPA in 2014, specifically to assess the relationship between MPAs and cetaceans. She also officially invited the GFCM to participate in this event.

AMER - Adriatic Marine Ecosystem Recovery (Carlo Cerrano, Università Politecnica delle Marche). The presentation introduced the Adriatic Marine Ecosystem Recovery (AMER) project and its main goal of supporting the establishment of a large, transboundary marine management area (MMA) in the Adriatic Sea in order to preserve and restore remnant benthic assemblages, fish populations, sea turtles and marine mammals. The economic importance of the activities sustained by the natural resources of the Adriatic Sea such as fishing and tourism were recalled. The long history of exploitation and the advanced state of ecosystem depletion in this area led to the need to develop management strategies in order to avoid further depletion and promote the recovery of once productive marine ecosystems. The roadmap towards the establishment of a Macro-Adriatic-Ionian Region under the auspices of the European Commission provided a great unprecedented opportunity to foster marine spatial planning and protection of marine resources at the basin scale, Beyond the National Jurisdiction (BNJ). The AMER proposed area, based on the objective of conserving Adriatic ecosystems and their services, comprised the international waters of the Croatian Economic Exclusive Zone (EEZ) and part of the outermost section of the contiguous international waters of a hypothetical Italian EEZ. The main expected short and long term benefits coming from the institution of the MMA were: increase of the social awareness on marine ecosystems, decrease of human pressure and increase sustainable activities. It was underlined that great benefits for commercial fisheries deriving from the spillover in heavily exploited areas were expected.

19. The working group welcomed this initiative and commented that a proposal for establishing a GFCM FRAs could be also foreseen within the project.

#### CONCLUSIONS AND RECOMMENDATIONS

- 20. Participants agreed that the GFCM fisheries restricted area (FRA) was a valuable tool to be considered at the regional level as it offered some important advantages including: i) a linear and simple process for its establishment, ii) open to different type of stakeholders and iii) easy to be complemented with additional protection measures (to be adopted by other regional competent organizations and national authorities).
- 21. In this regard, it was recommended to provide added value to the GFCM FRAs proposing the overlap among different protection layers, and namely by:
  - designating national MPAs in those areas which fall within national waters and that already overlap with the designated FRA in areas deeper than 1000 m.
  - designating fisheries restricted areas in areas already protected by different designations (e.g. the Pelagos International Sanctuary could host a FRA if relevant for the objectives of this recognized SPAMI)
- 22. Regarding the issue of making the different processes more compatible and complementary between the several organizations, the first step was taken by the working group which agreed on proposing the standardization of some elements of the existing form templates to request different protection measures in the Mediterranean region. It was therefore recommended that the three existing official forms for fisheries restricted areas (GFCM), Areas of special importance for cetaceans (ACCOBAMS), and Specially Protected Areas of Mediterranean Importance (UNEP/MAP) include the following elements regarding fishing activities and related socio-economics aspects:
  - Number of vessel by fishery operating in the area
  - Total annual catches by species of each fishery
  - Percentage of total catches fished in the area
  - Value of this catches and percentage respect to the total
  - By-catch rates of endangered species

- 23. This proposal of shared elements within the forms should be prepared and presented to the Contracting Parties of each organization for possible final endorsement and adoption.
- 24. The working group underlined that for the harmonization with final purpose of protecting biodiversity and recovery of exploited resources, the technical collaboration and cooperation among the different organizations or bodies such as UNEP-MAP RAC/SPA, ACCOBAMS, UNESCO, IMO, MedPAN, OCEANA, WWF, was strongly needed. On this regard the existing MoUs established with UNEP/MAP, MedPan and the one in progress with WWF were seen as the most appropriate tool to progress in this direction.
- 25. Within the institutional framework, the importance of strengthening collaboration and cooperation among the relevant intergovernmental organizations was underlined, in particular with the aim of strengthening current measures and exploring the possibilities of developing new joint designations, either by submitting the same proposal to two governing bodies or endorsing the designation one after the other.
- 26. The working group highlighted the importance of risks/benefits assessment, communication or awareness-raising on the type and objectives of spatial management measures among relevant stakeholders, particularly the fishing sector, and stressed that a participatory process was a key element for the success of protection initiatives.
- 27. A pilot study to test collaboration between organizations could be carried out focusing firstly on the conservation of exploited resources (e.g. spawning grounds, nursery areas). It could be complemented in a second step by extended protection in terms of surface and/or of restricted activities.
- 28. The GFCM Working Group on Marine Protected Areas outlined the future actions to be carried out:
  - Inventory of existing national areas subject to spatial based fisheries management measures under the provisions of national legislation (e.g. seasonal closures, gear restrictions) (GFCM Secretariat in collaboration with MedPAN and involved national authorities).
  - Exploring the possibility of assigning IUCN protected areas management categories to GFCM FRAs and to the above mentioned areas (GFCM Secretariat in collaboration with IUCN).
- 29. Furthermore, in light of the outcomes of the questionnaires on the status of the GFCM fisheries restricted areas, mechanisms to ensure control and enforcement of existing FRAs should be defined. Criteria for the regular evaluation of FRA management should also be foreseen (as is for the SPAMIs) as well as the possibility to define a scheme of joint international surveillance at the regional level.

#### ENDORSEMENT OF THE CONCLUSIONS AND CLOSURE OF THE MEETING

- 30. The conclusions and recommendations as presented in this report were adopted by the working group on  $3^{rd}$  February 2013 at 19.00 hours. The whole report was adopted after revisions and amendments by e-mail.
- 31. The GFCM Secretariat reiterated its thanks to Montenegro for the hospitality and the excellent support provided in the organization of the meetings and to the participants for the fruitful participation and contributions.

#### Appendix A

#### Agenda

#### 1. Opening and adoption of the agenda

#### 2. Current status of protected areas in the Mediterranean

- 2.1. GFCM Fisheries Restricted Areas (FRAs) (Aurora Nastasi, GFCM Secretariat)
- 2.2. Marine Protected Areas. Global trends and targets, with regards to the Mediterranean context (François Simard, IUCN)
- 2.3. National Marine Protected Areas (MPAs) (Chloë Webster, MedPAN)
- 2.4. Can FRAs in territorial waters be considered as MPAs? (Alain Jeudy de Grissac, IUCN)
- 2.5. Areas of special importance for cetaceans (Florence Descroix-Comanducci and Chedly Rais, ACCOBAMS)
- 2.6. Status of Pelagos Sanctuary (H.E., Patrick Van Klaveren)

#### 3. State of play and current processes to identify potential areas to be protected

- 3.1. Setting Priorities for Regional Conservation Planning in the Mediterranean Sea (Pilar Hernández, GFCM Secretariat)
- 3.2. MPAs in the Mediterranean Sea: addressing opportunities to face the protection gap (Pilar Marin, OCEANA)
- 3.3. Multi-sector participatory planning to achieve effective MPAs and MPA networks (Marina Gomei, WWF)

# 4. Discussion on possibilities of harmonizing requirements and work processes among organizations

- 4.1. Brief introduction (Chair)
- 4.2. Operational Criteria For Identifying SPAMIs In Areas Of Open Seas, Including The Deep Sea (Daniel Cebrian, UNEP-MAP RAC-SPA)
- 4.3. Legal issues and SPAMIs (Tullio Scovazzi, University of Milano Bicocca, UNEP-MAP consultant)

## 5. Planning of a study for the identification of potential areas to be protected by combining more than one measure (e.g. SPAMI-FRA)

5.1. State of progress of the joint action with the EC to promote establishing SPAMIs in open seas, including deep seas, and third phase steps (Daniel Cebrian, UNEP-MAP RAC-SPA)

#### 6. Any other matter

6.1. AMER – Adriatic Marine Ecosystem Recovery (Carlo Cerrano, Università Politecnica delle Marche)

#### 7. Conclusions and recommendations

### 8. Endorsement of the conclusions and closure of the meeting

#### Appendix B

#### List of participants

#### **Mehrez BESTA**

Direction Générale de la Pêche et de l'Aquaculture 30 Rue Alain Savary 1002 Tunis, Tunisia

E-mail: mehrezbesta@gmail.com

#### **Thomas BOUYER**

Ministère de l'écologie / Direction des pêches maritimes et de l'aquaculture Délégation française Tour Voltaire Place des degrés, 92055 La Défense France E-mail: <a href="mailto:thomas.bouyer@developpement-durable.gouv.fr">thomas.bouyer@developpement-durable.gouv.fr</a>

#### Mohamed Nejmeddine BRADAI

Institut National des Sciences et Technologies de la Mer (INSTM) BP 1035, Sfax, Tunisia

E-mail: mednejmeddine.bradai@instm.rnrt.tn

#### **Daniel CEBRIAN**

UNEP/Mediterranean Action Plan Regional Activity Centre for Specially Protected Areas (UNEP/MAP-RAC/SPA)

B.P. 337, 1080 Tunis Cedex Tunisia E-mail: <a href="mailto:daniel.cebrian@rac-spa.org">daniel.cebrian@rac-spa.org</a>

#### Ramazan CELEBI

Head of department General Directorate of Fisheries and Aquaculture Ministry of food, agriculture and livestock Ankara, Turkey

E-mail: ramazan.celebi@tarim.gov.tr

#### Carlo CERRANO

DISVA

Università Politecnica Marche Via Brecce Bianche Ancona, Italy

E-mail: c.cerrano@univpm.it

#### Florence DESCROIX-COMANDUCCI

ACCOBAMS Executive Secretary Jardin de l'UNESCO Les Terrasses de Fontvieille MC 98000 Monaco

E-mail: fcdescroix@accobams.net

#### Mirko DJUROVIC

Institute of marine biology Dobrota BB

Kotor, Montengero

E-mail: mdjurovic@ibmk.org

#### **Marina GOMEI**

MPA program officer WWF Mediterranean Programme Office Via Po 25/C 00198 Rome, Italy

E-mail: mgomei@wwfmedpo.org

#### Fabio GRATI

CNR-National Research Council ISMAR-Institute of Marine Science L.go Fiera della Pesca, 2 60125 Ancona, Italy E-mail: f.grati@ismar.cnr.it

#### Alain JEUDY DE GRISSAC

**IUCN** 

Centre for Mediterranean Cooperation Calle Marie Curie, 22 29590 Campanillas Malaga, Spain E-mail: alain.jeudy@iucn.org

#### **Nada KOSIC**

Ministry of Agriculture and Rural Development Rimski trg 46 81 000 Podgorica, Montenegro E-mail: nada.kosic@mpr.gov.me

#### Pilar MARÍN

OCEANA Marine Habitats Scientist MedNet Project Coordinator

Plaza España - Leganitos, 47 28013 Madrid, Spain

20013 Madrid, Spain

E-mail: <a href="mailto:pmarin@oceana.org">pmarin@oceana.org</a>

#### François POISSON

IFREMER Avenue Jean Monnet CS 30171 34203 Sete Cedex France E-mail: francois.poisson@ifremer.fr

#### **Chedly RAIS**

ACCOBAMS Consultant Jardin de l'UNESCO Les Terrasses de Fontvieille MC 98000 Monaco

E-mail: <a href="mailto:chedly.rais@okianos.org">chedly.rais@okianos.org</a>

#### Giuseppe SCARCELLA

ISMAR - CNR L.go fiera della pesca Ancona, Italy

E-mail: g.scarcella@ismar.cnr.it

#### Tullio SCOVAZZI

UNEP/MAP Consultant University of Milano-Bicocca Via Alfonso Cossa 29 Milan, Italy E-mail: tullio.scovazzi@unimib.it

#### François SIMARD

**IUCN** 

Rue mauverney 28, Gland 1196, Switzerland

E-mail: francois.simard@iucn.org

#### Nika STAGLICIC

Institute of oceanography and fisheries Split, Croatia

E-mail: nika@izor.hr

#### **H.E. Patrick VAN KLAVEREN**

Ministry for Foreign Affairs Ministère d'Etat Place de la Visitation MC98000 Monaco

E-mail: <a href="mailto:pvanklaveren@gouv.mc">pvanklaveren@gouv.mc</a>

#### Francisco Javier VAZQUEZ ALVAREZ

European Commission rue Joseph II 99 1049 Bruxelles, Belgium

E-mail: Francisco-Javier.VAZQUEZ-

ALVAREZ@ec.europa.eu

#### Chloë WEBSTER

MedPAN

Scientific Officer

Mediterranean Protected Areas Network

48, rue Saint –Suffren 13006 Marseille, France

E-mail: chloe.webster@medpan.org

#### FAO

#### Jessica SANDERS

Food and Agriculture Organization of the UN (FAO)

Fisheries and Aquaculture Department viale delle terme di Caracalla 1 00153 Rome, Italy

E-mail: jessica.sanders@fao.org

#### Juan Antonio CAMIÑAS

FAO CopeMed II Project Coordinator Fisheries and Aquaculture Resources Use and Conservation Division (FIRF) Subdelegación del Gobierno en Malaga Paseo de Sancha 64 29071 Malaga, Spain

E-mail: juanantonio.caminas@fao.org

#### Luca CERIOLA

FAO MedSudMed

Fisheries and Aquaculture Resources Use and Conservation Division (FIRF) via delle Terme di Caracalla 1 00153 Rome, Italy

E-mail: luca.ceriola@fao.org

#### Chair

#### Federico ÁLVAREZ

Centro Oceanográfico de Baleares Instituto Español de Oceanografía Muelle Poniente s/n 07080 Palma de Mallorca, Spain E-mail: federico.alvarez@ba.ieo.es

#### **GFCM Secretariat**

#### Abdellah SROUR

GFCM Executive Secretary
Food and Agriculture Organization of the UN
Fisheries and Aquaculture Department
Via Vittoria Colonna 1
00193 Rome, Italy

Ph: +39 06 570 55730 Fax: +39 06 570 55827

E-mail: abdellah.srour@fao.org

#### Pilar HERNÁNDEZ

Information Management Officer Food and Agriculture Organization of the UN Fisheries and Aquaculture Department Via Vittoria Colonna 1 00193 Rome, Italy Ph: +39 06 57054617

E-mail: pilar.hernandez@fao.org

**Aurora NASTASI** 

Consultant for environmental issues Food and Agriculture Organization of the UN Fisheries and Aquaculture Department Palazzo Blumenstihl, Via Vittoria Colonna 1 00193 Rome, Italy

Ph: +39 06 57052054

E-mail: aurora.nastasi@fao.org

## Appendix C

Table 1. Protected Area and Marine Protected Area definitions in comparison with GFCM Fisheries Restricted Areas

| Organization/ Entity                               | Term and Definition   | Context of this adoption  | Objectives/target of the protection   | Related legal aspects  | Activities regulated (if any)                 |
|--|---|---|---|--|---|
| General Fisheries Commission for the Mediterranean | FRA. A Fisheries Restricted<br>Area is a spatial protection<br>tool under GFCM authority<br>Its establishment implies<br>fisheries restrictions<br>(limit or prohibit certain<br>fisheries/gears) within<br>delimited areas                                 | GFCM agreement  | A) Preserving fisheries related resources and B) protect vulnerable habitats  | GFCM is an RFMO entitled to adopt spatial management measures that regulate or restrict human activities in its competence area (Mediterranean, Black sea and connecting waters)   | Fisheries                                     |
| IUCN   | Protected Area. A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values | This definition has been discussed within IUCN members and constituency. The most recent updated version was adopted in 2008. The definition has evolved significantly and in many cases, the relevant international conventions and the states did use former versions | Conservation of biodiversity and sustainable use of natural resources   | Not by IUCN, but this definition has been adopted by all the Environmental international organisations and agreements, such as UNEP and CBD, and therefore is the base for legal text in many countries  | All   |
| Convention on Biological Diversity                 | MPA. Marine protected area means a geographically defined area located in the sea or seabed which is designated, regulated and managed to achieve specific conservation objectives  | CBD   | The definition includes three elements, namely: A) a geographical delimitation of the MPA (boundary lines on a map); B) a conservation objective (e.g., so-called marine parks for offshore wind energy installations are not included); C) a stricter regime than elsewhere in the sea (but this does not mean that any activity is prohibited within the MPA) | MPAs can be established in any kind of Mediterranean waters and seabed, irrespective of their legal condition (marine internal waters, territorial sea, exclusive economic zone, fishing zone, ecological protection zone, continental shelf, high seas). It is strongly recommended to avoid the terminology "open sea" or "deep sea" that will inevitably lead to legal and political difficulties | Broad enough to cover all kinds of activities |

Table 2. SWOT analysis performed during the meeting on the GFCM Fisheries Restricted Area protection figure

| Strengths  | Weaknesses   | <b>O</b> pportunities  | Threats   |
|--|--|--|---|
| <ul> <li>simple process to propose a FRA</li> <li>no applicants restrictions (e.g. not only GFCM Members)</li> <li>FRAs should be considered MPAs because in its definition a FRA clearly includes a wider protection of marine ecosystems. According to IUCN, this definition is then compatible with the globally agreed definition of MPA (on the contrary, Spatial areas which may incidentally appear to deliver nature conservation but do not have stated nature conservation objectives should not automatically be classified as MPAs, as defined by IUCN. These include: Fishery management areas with no wider stated conservation aim (Day et al 2012²)</li> </ul> | <ul> <li>difficult to quantify the effectiveness of FRAs</li> <li>correct management entirely under countries' responsibility</li> <li>low performance in enforcement within already designated FRAs</li> <li>difficult to gather the information required by the FRA proposal's form especially for the open sea areas for which often scarce scientific information is available; more flexibility in the FRA Standard Form is needed for new open sea designations</li> <li>the existing capacities/mechanisms to ensure the enforcement and proper management of FRA is not sufficient to achieve FRAs' objectives.</li> </ul> | <ul> <li>internationally recognized need to create networks of MPAs also protecting high seas socio-economics implications of limiting/forbidding fishing activities no applicants restrictions (e.g. not only GFCM Members)</li> <li>legal framework and a protection tool already available at the Mediterranean level to designate FRAs in ABNJ</li> <li>FRAs could be designated on the VMEs already identified by FAO as well as CBD having these areas a recognized biological importance (e.g. seamounts and submarine canyons assemblages)</li> <li>MoU signed by GFCM and UNEP-MAP and the related Resolution GFCM/37/213/1 adopted during the 37th GFCM session which could be the basis of a joint project on a Pilot Area in the open sea to be declared FRA and SPAMI (e.g. Alboran Sea, Adriatic, Strait of Sicily)</li> <li>the regional collaboration could support the establishment of a GFCM international inspection scheme for the control of all ABNJ and reinforce the role of the Committee of Compliance, under this frame any Member could patrol any of the areas with a coordinated effort</li> <li>overlapping with other protection initiatives</li> </ul> | <ul> <li>socio-economics implications of limiting/forbidding fishing activities which could refrain Members to push for the establishment of new FRAs</li> <li>non-reported activities jeopardizing VMEs inside FRAs (e.g. oil/gas prospections in Eratosthenes)</li> <li>creating additional Paper Parks which will undermine the effort that players have already made at national and international level</li> </ul> |

Table 3. SWOT analysis performed during the meeting on MPAs as defined by the Convention on Biological Diversity (CBD)

| Strengths   | Weaknesses | <b>O</b> pportunities  | Threats  |
|---|------------|--|--|
| the adoption of such a broad definition<br>(see Table 1) would allow the keeping of<br>the present terminology (FRA, SPAMI,<br>PSSA, etc.) and the preservation of the<br>present cultural diversity between<br>institutions that pursue different, but<br>complementary, conservation purposes<br>within the Mediterranean |            | <ul> <li>broad enough do develop a<br/>complementary approach among the<br/>institutions involved</li> </ul> | concerns from countries about the<br>perception of MPAs as no-take areas<br>(need of awareness campaigns<br>addressed to fishing sector) |

Appendix D

#### Background document Status of GFCM Fisheries Restricted Areas (Fras)

#### First draft<sup>6</sup>

#### INTRODUCTION

Protected areas *sensu lato* have been created to face the perils and pressure caused by human activities affecting fauna, flora and related habitats and to slow down the erosion of biodiversity (UNEP-MAP-RAC/SPA 2010). "Protection" purposes often complement a broad range of other national development objectives that extend beyond environmental protection; food security, decreased poverty incidence, improved governance, increased added value in international trade, and economic growth, are increasingly being seen as consistent with the more traditional environmental agenda of biodiversity conservation (IUCN, online).

Within this framework, marine protected areas (MPAs) have been conceived and set up as a tool for the conservation and sustainable management of littoral and marine environment so as to preserve sites of great ecological value, coastal ecosystems and habitats and to protect threatened species as well as natural resources of the marine domain (UNEP-MAP-RAC/SPA 2010). As a matter of fact, the need to better safeguard our marine environment and manage the use of existing aquatic resources for sustainability is increasingly being recognized worldwide (FAO, 2011).

In parallel, as the fisheries sector moves toward management according to the Ecosystem Approach to Fisheries (EAF) – which requires maintenance of biodiversity – MPAs have also recently become a fisheries management tool to protect the spawning grounds and nurseries and thus constituting sanctuaries of repose for over-exploited species (FAO, 2011). In fact, within MPAs, it has been proved that the abundance and size of commercial and non-commercial species of fish increases in contrast to what happens in non-protected zones. Furthermore, MPAs have a beneficial effect on fisheries outside the protected perimeters as they contribute towards the dissemination of juveniles and adults and the exportation of eggs and larvae of pelagic origin. Properly established and managed MPAs increase the productivity of the fishing areas, generate incomes and also constitute a tool to achieve the sustainable exploitation of sea and littoral areas (UNEP-MAP-RAC/SPA 2010).

#### MEDITERRANEAN MARINE PROTECTED AREAS: A GENERAL VIEW

In the last decades, countries have in particular recognized the need to increase the areas under marine protection within their jurisdictions in order to reduce the loss of marine biodiversity and committed themselves towards this objective (IUCN, online). The designation and management of MPAs and MPA networks in the Mediterranean is driven by a range of international, regional, and national instruments and initiatives, e.g.: the Mediterranean Action Plan (MAP) and the Barcelona Convention (1975 and 1995) have addressed conservation priorities by establishing Specially Protected Areas of Mediterranean Importance (SPAMIs);

<sup>&</sup>lt;sup>6</sup> February 2014

the European Community launched an ecological network (Natura 2000), the Bern Convention has set up the Emerald network, etc. At present, the main international instrument for multilateral cooperation is the Convention on Biological Diversity or CBD (1992). All Mediterranean countries have ratified the CBD and agreed on the law that compels them to reduce the biodiversity loss on land and at sea (UNEP-WCMC 2008). The CBD Strategic Plan for Biodiversity 2011–2020 contains twenty targets (Aichi Targets) which are recognised worldwide as instruments to promote the health of the planet. Among others, Target 117 foresees that at least 10 percent of coastal and marine areas should be "conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape" by 2020.

In the Mediterranean, protected areas are extremely diverse in terms of nature and typologies and they are often closely linked to the legislative frameworks and to national and international regulations (UNEP-MAP-RAC/SPA<sup>8</sup> 2010). However, a recent inventory of all existing Mediterranean MPAs carried out by MedPAN<sup>9</sup> and RAC/SPA (Gabrié et al. 2012) indicated that the 677 MPAs (including national MPAs, Natura 2000 sea sites, Pelagos Sanctuary and GFCM Fisheries Restricted Areas – FRAs) account for 5.26 percent of the total surface of the Mediterranean Sea. The large majority of these have been often specifically established with the goal of protecting particular environments with high biological value such as *Posidonia oceanica* medows, rare biocenosis of vermetid, coralligenous formations, etc. reducing human pressure on endangered species (e.g. the monk seal *Monachus monachus*, sea turtles *Caretta caretta* and *Chelonia mydas*), and providing safe reproduction zones for a large variety of birds species inhabiting the protected areas (UNEP-MAP-RAC/SPA 2010, Gabrié et al. 2012).

According to Gabrié et al. (2012) it is clear that the current Mediterranean picture calls for a stronger development of MPA networks in order to meet the 2020 target to protect 10 percent of Mediterranean surface<sup>10</sup>, and such target could be achieved in particular by extending the boundaries of existing MPAs, creating new coastal MPAs and new MPAs in areas beyond national jurisdiction (high seas), integrating other areas of usage restrictions which could contribute to biodiversity conservation (e.g. fisheries reserves). However, environment and fisheries governance in the high seas pose particular challenges, which also obviously reflect on the opportunities to designate and manage MPAs and especially MPA networks (FAO, 2011). The concept and importance of comprehensive, well-managed and ecologically representative MPA networks have been reiterated in many fora.

Recently, during the Third International Marine Protected Areas Congress (IMPAC3, October 2013) and during the Eighteenth meeting of the Contracting Parties (COP) of the Mediterranean Action Plan (MAP) of the Barcelona Convention (December, 2013), the need of committing to develop a comprehensive, coherent network of well-managed marine

<sup>&</sup>lt;sup>7</sup> Target 11: By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider land-scape and seascapes (<a href="http://www.cbd.int/sp/targets/">http://www.cbd.int/sp/targets/</a>).

<sup>&</sup>lt;sup>8</sup> The Regional Activity Centre for Specially Protected Areas established by the Contracting Parties to the Barcelona Convention and its Protocols in order to assist Mediterranean countries in implementing the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (<a href="http://www.rac-spa.org/">http://www.rac-spa.org/</a>)

<sup>&</sup>lt;sup>9</sup> The Network of Marine Protected Areas managers in the Mediterranean (<a href="http://www.medpan.org/">http://www.medpan.org/</a>)

 $<sup>^{10}</sup>$  In February 2012, Contracting Parties to the Barcelona Convention agreed to achieve the Aichi Target 11, 10% of marine protection at Mediterranean level by 2020.

protected areas – also in the high seas – was pointed out, one more time, as a priority, recognizing the role that Regional Fisheries Management Organization (RFMO) may play in managing MPAs at the regional level. In this light, the crucial role to be played by those RFMOs empowered to set binding measures in areas beyond national jurisdiction is self-evident.

#### GFCM AND SPATIAL MANAGEMENT MEASURES IN THE HIGH SEAS

The General Fisheries Commission for the Mediterranean (GFCM) is the RFMO with competence over the Mediterranean and Black Sea. The GFCM, established in 1952 under the provisions of the FAO constitution, has the objectives to promote the development, conservation, rational management and best utilization of living marine resources, as well as the sustainable development of aquaculture in the Mediterranean, Black Sea and connecting waters. The GFCM adopts fisheries conservation and management measures that are binding to its 24 Members<sup>11</sup>. Within this framework, the GFCM activities also aim at ensuring an appropriate protection of marine species, ecosystems and habitats which could be threatened by human activities, especially in relation to fisheries.

In the last years, the GFCM has been addressing issues related to marine protected areas especially as a tool for fisheries management with the final goal of preserving fisheries resources also minimizing the impact of fishing on specific habitats with a high value from a biological point of view (see meeting reports of Transversal Workshop on Marine Protected Areas – in collaboration with RAC/SPA – Salammbô, Tunisia, 24-25 May 2007; Transversal Workshop on Spatial Based Approach to Fisheries Management, Rome, Italy, 6–8 February 2012). At present, the GFCM is one of the few RFMOs worldwide entitled to adopt spatial management measures that regulate or restrict human activities in the high seas, e.g. by introducing closures or prohibiting the use of certain gears.

#### THE FRA TOOL

Regarding the establishment of fisheries restrictions within limited areas, the protection figure named **Fisheries Restricted Area (FRA)** regulates or prohibits fisheries activities *sensu lato* within a certain area (for example, by regulating the use of certain gears).

The establishment of a FRA, in the Mediterranean and Black Sea area, can be potentially requested to the GFCM by any stakeholder, e.g. institution, scientists, GFCM Members, NGOs, private sector, etc. The proposal for the establishment of a new FRA should be submitted to the GFCM through an *ad-hoc* form (available on the GFCM website<sup>12</sup>), providing information on the area, site description, biological features, human activities and impacts, legal status, objective of the FRA, etc. The process for the establishment of a GFCM Fisheries Restricted Area is summarized in figure 1 and it consists of several steps. First, the proposal is presented to the Subcommittee on Marine Environment and Ecosystems (SCMEE), one of the four technical subsidiary bodies of the GFCM. Experts participating in the SCMEE provide their scientific and technical assessment to the Scientific Advisory Committee that is an institutional body in charge of reviewing the proposal and deciding

<sup>&</sup>lt;sup>11</sup> Albania, Algeria, Bulgaria, Croatia, Cyprus, European Union, Egypt, France, Greece, Israel, Italy, Japan, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Romania, Slovenia, Spain, Syrian Arab Republic, Tunisia, Turkey.

 $<sup>^{12}\ \</sup>underline{\text{https://gfcmsitestorage.blob.core.windows.net/contents/ReportingTools/GFCM-FRA-form.doc}}$ 

whether to submit it to the Commission or to request the proposal to be completed with more comprehensive scientific information. Once the SAC considers that the proposal is complete, this is submitted to the Commission – the decision body composed of all GFCM Members – for its potential final endorsement.

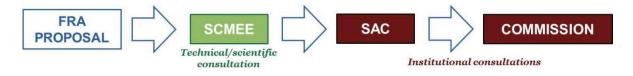


Figure 1. Process for the establishment of a FRA within the GFCM.

It is also worth mentioning that a FRA can potentially be established to protect any kind of marine resource and environment (e.g. vulnerable sponges' aggregations, seamount areas, coralligenous formations, seagrasses meadows, spawning grounds and reproduction sites for marine animals, etc.) from relevant fishing activities.

#### **EXISTING FRAS**

In 2006, the Recommendation GFCM/30/2006/3<sup>13</sup> established three fisheries restricted areas, falling both in high seas and national waters, to guarantee the protection of deep sea sensitive habitats in well-delimited sites. These areas were defined as:

- a) Deep Sea fisheries restricted area "*Lophelia* reef off Capo Santa Maria di Leuca" (1 672.6 km², GSA 19, Italy). This area was protected to guarantee the conservation of a unique ecosystem of cold-water corals.
- b) Deep Sea fisheries restricted area "The Nile delta area cold hydrocarbon seeps" (6 042.6 km², GSA 26, Egypt). This area hosts an exceptionally high concentration of cold hydrocarbon seeps supporting unique living communities of presumably chemosynthetic organisms such as polychaetes and bivalves.
- c) Deep Sea fisheries restricted area "The Eratosthenes Seamount"

(14 791.6 km², GSA 25, Cyprus). The area has a rich and diverse ecosystem, notably composed by species of scleractinian corals (*Caryophyllia calveri* and *Desmophyllum cristagalli*), which were the first living records from the Levant Basin and significantly extended the species' depth ranges, a rare deep water sponge, *Hamacantha implicans*, known previously from a canyon in the western Mediterranean, a remarkably dense population of the deep water actinarian *Kadophellia bathyalis*, and unidentified zoantharians and antipatharians. The high faunal diversity and density indicate a uniquely rich environment in the Levant Basin, possibly an isolated refuge for relict populations of species that have disappeared from the adjacent continental slope.

In these areas, fishing activities with towed dredges and bottom trawl nets have been prohibited and the concerned GFCM Members committed to protect the areas from the impact of any other activity jeopardizing the conservation of the features that characterize these particular deep sea habitats.

In 2009, the Recommendation GFCM/33/2009/114, freezed the fishing effort within a particular area of **the Gulf of Lion** (France, GSA 07, area of 3 741.6 km<sup>2</sup>) that was

<sup>&</sup>lt;sup>13</sup> Rec. GFCM/30/2006/3 On the establishment of fisheries restrictive areas in order to protect the deep sea sensitive habitats.

recognized as an area of spawners' aggregation of fish resources and concerned GFCM Members committed to protect the area from the impact of any other activity potentially jeopardizing the conservation of the features that characterized the spawning habitats.

In 2010, OCEANA presented to the eleventh meeting of the SCMEE a proposal for a new FRA to be established in the Balearic Seamounts area (GSA 05) to protect significant communities of Maërl and coralligenous formations. The proposal was not validated by the thirteenth session of SAC in 2011 as it was considered lacking of quantitative data on benthic biomass as well as socio-economic information.

In addition to the said fisheries restricted areas, it is has to be pointed out that in 2005 the GFCM endorsed the decision of prohibiting bottom-trawling activities in waters deeper than 1000 m in order to protect the deep-sea benthic environment (REC. GFCM/29/2005/1<sup>15</sup>).



Figure 2. Location of the four GFCM FRAs and 1000 m isobath. From left to right: the FRA in the Gulf of Lion, the FRA off Santa Maria di Leuca, the FRA above the Eratosthenes Seamount, and the FRA off the Nile Delta area. The total area covered by these FRAs is 26 248 km² (0.15% of the Mediterranean Sea).

#### STATUS OF GFCM FRAS

The first meeting of the GFCM Working Group on Marine Protected Areas (created in May 2013) offers the most appropriate forum to review the status of the FRAs and to discuss their effectiveness of together with Members, partners and stakeholders involved at the regional

<sup>&</sup>lt;sup>14</sup> Rec. GFCM/33/2009/1 On the establishment of a fisheries restricted area in the Gulf of Lions to protect spawning aggregations and deep sea sensitive habitats

<sup>&</sup>lt;sup>15</sup> Rec. GFCM/29/2005/1 Management of certain fisheries exploiting demersal and deepwater species

level. In order to gather information on the present status of the FRAs, a questionnaire was submitted to each GFCM Member in July 2013.

#### **QUESTIONNAIRES**

In July 2013, the GFCM Secretariat submitted a questionnaire to its Members asking them to complete it on a voluntary basis. The main purpose of the questionnaire was to understand the perception of FRAs and related recommendations by the GFCM Members.

Each Member received one questionnaire with questions that had been specifically developed on the basis of the geographic distance between FRAs and the Members States. Five types of questionnaires were thus drafted:

- Questionnaire 1 (Annex A): **GENERAL QUESTIONS ON FRAs** (Albania, Algeria, Bulgaria, Croatia, Greece, Israel, Japan, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Romania, Slovenia, Syrian Arab Republic, Tunisia, Turkey)
- Questionnaire 2 (Annex B): GENERAL QUESTIONS ON FRAS AND SPECIFIC QUESTIONS ON THE FRA OF THE GULF OF LION (Spain and France)
- Questionnaire 3 (Annex C): GENERAL QUESTIONS ON FRAS AND SPECIFIC QUESTIONS ON THE FRA OF THE ERATOSTHENES SEAMOUNT (Cyprus)
- Questionnaire 4 (Annex D): GENERAL QUESTIONS ON FRAS AND SPECIFIC QUESTIONS ON THE FRA OF THE NILE DELTA AREA COLD HYDROCARBON SEEPS (Egypt)
- Questionnaire 5 (Annex E): GENERAL QUESTIONS ON FRAS AND SPECIFIC QUESTIONS ON THE FRA OF THE LOPHELIA REEF OFF CAPO SANTA MARIA DI LEUCA (Italy)

Most countries therefore received *Questionnaire 1* on general questions about the existing FRAs.

#### MAIN RESULTS

Thirteen out of 23 questionnaires were submitted back to the GFCM Secretariat and the following results hence relate to 57 percent of the sample-surveyed. However, 4 out of 5 of countries more involved in the management of the existing FRAs – which received questionnaires 2, 3, 4 and 5 – submitted back the questionnaire.

#### The FRA of the Gulf of Lion

The FRA of the Gulf of Lion is the most recent fisheries restricted area established by the GFCM to protect more specifically part of the continental slope of the Eastern Gulf of Lion which represents a refuge for large spawners of several commercially exploited species (Massutí et al, 2008) The GFCM recommendation indicates that the fishing effort in the area should not exceed the level of fishing effort applied in 2008. In order to quantify the fishing effort applied in 2008, Spain and France submitted to the EU and GFCM the complete list of vessels authorized to operate in that area in 2008 – including detailed information such as type of vessel, length, gear, number of fishing days exerted by each vessel, etc.

France indicates in the questionnaire that there has not been modification to the list of French vessels authorized to fish in the area since 2008 and that data on Vessels Monitoring Systems (VMS), on captures and effort are available and analized by IFREMER on behalf of the Direction des Pêches Maritimes et de l'Aquaculture and its Bureau des Statistiques des Pêches et de l'Aquaculture. Also, it mentions that a national law in compliance with the GFCM decision and related EU regulation has been issued. Concerning the effort, the data provided by France indicate that the number of fishing vessels which operated in the area decreased from 34 in 2008 to 13 in 2012, while the fishing days increased from 93 in 2008 to 237 in 2012. According to such data, there seems to be an upward trend in terms of total days spent fishing in the area from 2008 (2.7 days/vessel in 2008 vs. 18.2 days/vessel in 2012). However, the official authorized vessels list, officially transmitted by EU to the GFCM Secretariat<sup>16</sup>, reports that the total number of vessels operating in 2008 was 36, amounting to 594 fishing days (16.5 days/vessel); according to these data, the fishing effort of 2012 (18.2 days/vessel) seems to be maintained around the threshold figure. Further investigations are therefore needed to assess the true effort applied in 2008. No other information has been obtained in relation to this FRA from the other countries.

#### The FRA of the Eratosthenes Seamount

For the FRA of the Eratosthenes Seamount, Cyprus indicates that a national law has been issued to incorporate the related GFCM decision and that, consequently, no vessel with license to fish using towed dredges or bottom trawl nets carries out fishing activities in proximity or inside the fisheries restricted area. However, some vessels are authorized to operate with surface longlines close to or inside the area, since this gear is not prohibited by the GFCM decision. Cyprus also indicates that the area is not delimited, but that the Department of Fisheries and Marine Research (DFMR) is the competent authority for fishing activities and compliance with the legislation. Besides random patrols in the area under the provisions of the related recommendation, the DFMR monitors the FRA through Vessels Monitoring Systems (VMS) and Automatic Identification System (AIS). With regard to research carried out in the area of the Eratosthenes Seamount, some scientific research has focused on cetaceans' occurrence. All other countries declare that no information is available on this FRA since this area is not targeted by their national fleet.

#### The FRA of the Nile Delta area

Some information on the status of this FRA has been obtained through the questionnaire submitted to Egypt. Once again, all other countries declare that no information is available since this area is not targeted by their national fleet. Egypt indicates that the GFCM decision has not been incorporated in any specific national regulation and that some fishing activities with bottom trawling do occur in the area. The area is not delimited and no specific patrolling is in place besides the regular patrolling of the Egyptian Navy and border guards. Egypt also reports that some activities of exploration for natural gas and oil occur in the FRA area and that no research programmes are in place to investigate the status of the FRA's habitat.

## The FRA of the Lophelia Reef off Capo Santa Maria di Leuca

Information about this FRA – the smallest amongst the four – has been gathered through the Italian questionnaire. It reports that the area is not delimited, although national regulations

\_

<sup>&</sup>lt;sup>16</sup> 5 July 2011 - European Union (DG MARE)

have been issued. However, Italy makes reference to the EC Reg. 1967/2006 prohibiting fishing above corralligenous habitats in all the Mediterranean Sea which is not related to GFCM decisions. Control and patrolling activities in place to control fishing by the Italian authorities include: maritime fisheries' monitoring carried out by the "Capitaneria di Porto" (Italian Coast Guard). Italy also reports that the VMS, which is installed on fishing vessels with an overall length exceeding 15 m allows detection and identification of vessels and that data on hourly basis are automatically delivered to the responsible authority for recording and storing the information. Answers provided in relation to scientific research and programmes in place in the area indicate that the *Lophelia* reefs and related habitats are well studied and monitored from a scientific point of view. Dedicated studies are carried out by Italian as well as by international institutions and projects (e.g. EU FP7 CoralFish); as a consequence in the last ten years more than 20 papers on the coral banks of Santa Maria di Leuca have been published in scientific journals by authors from different countries and institutions.

#### **Future FRAs?**

Regarding the question on the possibility of requesting the establishment of new FRAs to the GFCM in national and/or in international waters, all countries having answered the questionnaire have indicated to be "not interested". Only Albania indicates that there is currently a national plan to establish new fisheries restricted areas at the national level and that these could be possibly implemented, as a further step, also at GFCM level. Egypt reports that in the country there is not enough research on the ecology of the marine environment available to support the planning of new FRAs. In addition, it reports that Countries should be assisted in implementing the necessary measures when establishing a FRA and, according to its experience, this has not happened when the FRA of the Nile Delta was established.

#### **CONCLUSIONS**

The answers provided in the questionnaires clearly demonstrate that GFCM Members are not interested in fisheries restricted areas established far off their national waters and fishing grounds. Mediterranean fleets often operate indeed within national waters or within the boundaries of the exclusive economic zone (EEZ) relevant to the country they belong to. Almost all Members having received Questionnaire 1 have indicated that no specific national regulation had been enforced to comply with the GFCM recommendations on FRAs since their national fleets do not operate and have never been operative in the four fisheries restricted areas; Malta only has indicated that a national regulation has been issued to enforce the Rec. GFCM/30/2006/3. However, all EU countries are subject to the EU legal framework and a specific EU regulation has been issued in this respect - Regulation (EU) No 1343/2011 of the European Parliament and of the Council on certain provisions for fishing in the GFCM Agreement area. This regulation includes the provisions of both GFCM recommendations related to the establishment of four FRAs. Since EU regulations directly enter in force in all EU countries as soon as they have been issued without the need to be furthered transposed in national legislation, EU countries can be considered as compliant under the legal point of view.

With regard to countries situated near existing FRAs and therefore involved in their management of (*i.e.* Cyprus, Egypt, France and Italy), the answers provided in the questionnaires highlight that there are differences among Members in their understanding of the different implications deriving from the establishment of a fisheries restricted area.

Concerning the three FRAs established to protect deep-sea habitats in the Mediterranean Sea, Italy and Cyprus seem to be aware of the implications generated by the establishment of the FRA of Santa Maria di Leuca and of the Eratosthenes Seamount. From the information provided it emerges that countries are willing to protect properly the areas, under the provisions of the GFCM recommendation. However, both areas are not officially delimited and little scientific research has been carried out in the area of the Eratosthenes Seamount. On the other hand, the FRA of the Nile Delta seems not to be properly recognized and adequately protected by the neighbouring country. The requirements foreseen by the GFCM recommendation that had established the FRA in the Gulf of Lion – to protect the adults and spawning grounds of exploited fish resources – seems to have been incorporated in the French national law as well as fisheries management plans and according to this, data collection and control are in place; nevertheless the data provided by France in the questionnaire indicates that the fishing effort – expressed as fishing days per vessel in the area – has increased since 2008; however fishing effort data provided in the questionnaire, for 2008, do not match with the official data provided to EU and GFCM. This discrepancy does not permit to clearly assess whether the fishing effort is kept stable or not in 2012.

As concerns the answers related to the possibility of requesting the establishment of new FRAs, the results of the review indicate scarce consideration by Member countries in respect to this protection tool. It has to be noted that the four existing FRAs have been proposed to the GFCM by non-governmental organizations and only the FRA of the Gulf of Lion, has been proposed by an NGO (WWF) together with Spanish and French institutions.

In conclusion, the results of this general assessment indicate that encouraging steps have been made almost by all countries involved in the management of such sensitive areas, and efforts to be compliant to the legislation have been made. There is no doubt that this protection tool has several strengths since, as mentioned, a FRA could be proposed by any subject/stakeholder and established not only to protect fisheries related resources, but also to protect from fisheries activities sensitive ecosystems and species such as sponges associations, coral banks, polychaetes assemblages, etc. However, it remains difficult to quantify the effectiveness of FRAs and to understand their contribution to the protection and conservation of habitats and resources, also due to the fact that monitoring, control and follow-up of FRAs to ensure their correct management entirely fall under the responsibility (and capabilities) of the countries involved. The reasons to explain the emerging low interest of national governments in proposing the establishment of new FRAs to the GFCM could be various. It is recognized that GFCM countries do apply fishing restrictions in national waters (GFCM 2014, in prep.) in order to better manage fisheries and regulate fishing effort in certain areas. If a fishing restriction measure is deemed necessary within an area which entirely falls within national waters, a country can exclusively rely on its national legislation. Therefore, the ecological importance of deep-sea and connected off-shore ecosystems is probably still poorly recognized by countries which are currently more focused on the wider protection of coastal zones. Moreover, the socio-economic implications of limiting or forbidding fishing activities in deep-sea areas could pose major challenges. In fact, whereas in coastal areas the management of multi-purpose MPAs with fishing restrictions could imply the reconversion of fishing activities into ecotourism activities, in high sea areas this kind of solutions are less feasible, also considering that the main target of fishing restrictions off shore could be industrial fisheries.

The current international context calls for the need to start protecting deep-sea habitats and create coherent networks of MPAs and biological corridors for living resources – also in high seas. This cannot remain unnoticed by policy-makers and governments who should in the near

future take into consideration (more and better) the available tools and institutional frameworks to develop rational and effective protection plans, also in waters beyond national jurisdiction. In this framework, protection tools such as FRAs and the role to be played by the GFCM, as the competent authority for the establishment of fisheries restrictions in high seas, are undoubtedly crucial to meet the striving protection objectives set for the Mediterranean basin.

#### REFERENCES

- 18<sup>th</sup> Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols. Draft Istanbul Declaration (https://cmsdata.iucn.org/downloads/istanbul\_declaration\_eng.pdf).
- Ajaccio Declaration, Appendix 1: Recommendations of the 3<sup>rd</sup> International Marine Protected Areas Congress
- FAO. Fisheries management. 4. Marine protected areas and fisheries. FAO Technical Guidelines for Responsible Fisheries. No. 4, Suppl. 4. Rome, FAO. 2011. 198p.
- Gabrié C., Lagabrielle E., Bissery C., Crochelet E., Meola B., Webster C., Claudet J., Chassanite A., Marinesque S., Robert P., Goutx M., Quod C. 2012. The Status of Marine Protected Areas in the Mediterranean Sea. MedPAN & RAC/SPA. Ed: MedPAN Collection. 256 pp.

#### **IUCN ONLINE**

- http://www.iucn.org/about/union/secretariat/offices/iucnmed/iucn\_med\_programme/marine\_programme/marine\_protected\_areas/
- Massutí, E., Ordinas, F., González, N., Pérez, A., Guijarro, B., & de Arcaya, U. F. V. Rubio y G. Pomar.-2008. Informe del seguimiento científico de la acción Piloto RAI. AP-26/2007: pesca experimental con arte de arrastre de fondo en el Golfo de León (Mediterráneo noroccidental).
- UNEP-MAP-RAC-SPA (2010) The SPAMIs of the Mediterranean Sea. RAC/SPA ed. Tunis, 59 p
- UNEP-WCMC (2008) National and Regional Networks of Marine Protected Areas: A Review of Progress. UNEP-WCMC, Cambridge.

#### Annex A

#### Ouestionnaire 1

A) In relation to the REC.GFCM/30/2006/3 on the Establishment of fisheries restricted areas in order to protect the deep sea sensitive habitats in the following areas:

#### "Lophelia reef off Capo Santa Maria di Leuca"

39° 27.72' N, 18° 10.74' E 39° 27.80' N, 18° 26.68' E 39° 11.16' N, 18° 04.28' E 39° 11.16' N, 18° 32.58' E

#### "The Nile delta area cold hydrocarbon seeps"

31° 30.00' N, 33° 10.00' E 31° 30.00' N, 34° 00.00' E 32° 00.00' N, 34° 00.00' E 32° 00.00' N, 33° 10.00' E

#### "The Eratosthenes Seamount"

33° 00.00' N, 32° 00.00' E 33° 00.00' N, 33° 00.00' E 34° 00.00' N, 33° 00.00' E 34° 00.00' N, 32° 00.00' E

- Does any vessel of your national fleet carry out fishing activities close by or inside one of the above mentioned areas?
- Are you aware of any other activity being carried out in the above mentioned areas?
- Has any national regulation been issued to prohibit the fishing with towed dredges and bottom trawl nets and to protect the mentioned areas from the impact of any other activity jeopardizing the conservation of the features that characterize their particular habitats? If **yes**, please include the name of the regulation
- B) In relation to the REC.GFCM/33/2009/1 on the Establishment of a Fisheries Restricted Area in the Gulf of Lion to protect spawning aggregations and deep sea sensitive habitats in the following area:

42°40'N, 4°20' E; 42°40'N, 5°00' E; 43°00'N, 4°20' E; 43°00'N, 5°00' E;

- Has any vessel of your national fleet carried out fishing activities close by or inside the above mentioned area from 2006 to date?
- If **yes**, could you please provide us with the *List of vessels* <sup>17</sup> operating in the area from 2006 to date (or for the years you have available)?
- Could you please provide us with the measure of catch and effort from 2006 to date (or for the years you have available) of the vessels which operated in the area?
- Has any national regulation been issued to comply with this recommendation? If **yes**, please include the name of the regulation
- C) In relation to fisheries restricted areas and fisheries restrictions in general (either spatial or seasonal) in high seas or in national waters is your Country planning to propose the establishment of a fisheries restricted area to the GFCM? If yes could you please give us information on the location and a brief description of the area?
- D) Additional comments on the topic of FRAs and marine protected areas from your side:

<sup>&</sup>lt;sup>17</sup> see paragraph 3 of Recommendation GFCM/33/2009/1 for the type of information required for each vessel

Annex B

#### Ouestionnaire 2

A) In relation to the REC.GFCM/30/2006/3 on the Establishment of fisheries restricted areas in order to protect the deep sea sensitive habitats in the following areas:

```
"Lophelia reef off Capo Santa Maria di Leuca"
```

```
39° 27.72′ N, 18° 10.74′ E
39° 27.80′ N, 18° 26.68′ E
39° 11.16' N, 18° 04.28' E
39° 11.16' N, 18° 32.58' E
```

"The Nile delta area cold hydrocarbon seeps"

```
31° 30.00' N, 33° 10.00' E
31° 30.00' N, 34° 00.00' E
32° 00.00' N, 34° 00.00' E
32° 00.00' N, 33° 10.00' E
"The Eratosthenes Seamount"
33° 00.00' N, 32° 00.00' E
```

33° 00.00' N, 33° 00.00' E 34° 00.00' N, 33° 00.00' E 34° 00.00' N, 32° 00.00' E

- Does any vessel of your national fleet carry out fishing activities close by or inside one of the above mentioned areas?
- Are you aware of any other activity being carried out in the above mentioned areas?
- Has any national regulation been issued to prohibit the fishing with towed dredges and bottom trawl nets and to protect the mentioned areas from the impact of any other activity jeopardizing the conservation of the features that characterize their particular habitats? If yes, please include the name of the regulation
- B) In relation to the REC.GFCM/33/2009/1 on the Establishment of a Fisheries Restricted Area in the Gulf of Lion to protect spawning aggregations and deep sea sensitive habitats in the following area:

```
42°40'N, 4°20' E;
42°40'N, 5°00' E;
43°00'N, 4°20' E:
43°00'N, 5°00' E;
```

- Is there any update on the fleet operating in the FRA within GSA07 respect to the list of vessels you submitted to the EC/GFCM?
- If yes, could you please provide us with the updated list of vessels operating in the area from 2009 to date (or for the years you have available)?
- Are you monitoring the catch and effort in the FRA? if yes, which organizations/institutions (e.g. IFREMER, IEO) are in charge of the monitoring? Are the reports available?
- Are the VMS data available to researchers?
- In order to analyze historical data and to assess the effectiveness of this FRA, could you please provide us with the measure of catch and effort from 2006 to date (or for the years you have available) of the vessels which operated in the
- Has any national regulation been issued to comply with this recommendation? If yes, please include the name of the regulation
- C) In relation to fisheries restricted areas and fisheries restrictions in general (either spatial or seasonal) in high seas or in national waters is your Country planning to propose the establishment of a fisheries restricted area to the GFCM? If yes could you please give us information on the location and a brief description of the area?
- D) Additional comments on the topic of FRAs and marine protected areas from your side:

#### Annex C

#### Ouestionnaire 3

A) In relation to the REC.GFCM/30/2006/3 on the Establishment of fisheries restricted areas in order to protect the deep sea sensitive habitats in the following areas:

```
"Lophelia reef off Capo Santa Maria di Leuca"
```

```
39° 27.72' N, 18° 10.74' E
39° 27.80′ N, 18° 26.68′ E
39° 11.16' N, 18° 04.28' E
39° 11.16' N, 18° 32.58' E
```

#### "The Nile delta area cold hydrocarbon seeps"

31° 30.00' N, 33° 10.00' E 31° 30.00' N, 34° 00.00' E 32° 00.00' N. 34° 00.00' E 32° 00.00' N, 33° 10.00' E "The Eratosthenes Seamount"

33° 00.00' N, 32° 00.00' E 33° 00.00' N, 33° 00.00' E 34° 00.00' N, 33° 00.00' E 34° 00.00' N, 32° 00.00' E

- Does any vessel of your national fleet carry out fishing activities close by or inside one of the above mentioned areas?
- Are you aware of any other activity being carried out in the above mentioned areas?
- Has any national regulation been issued to prohibit the fishing with towed dredges and bottom trawl nets and to protect the mentioned areas from the impact of any other activity jeopardizing the conservation of the features that characterize their particular habitats? If yes, please include the name of the regulation

#### B) In relation to the FRA of "The Eratosthenes Seamount":

- Has the area been delimited (e.g. buoy, cords, etc.) by the appropriate authorities? If yes, please describe how
- Is there any patrolling activity in place to control that fishing activities with towed dredges and bottom trawl nets are not occurring? If yes, please indicate the authority and the describe the control modalities
- Is there any patrolling activity in place in order to protect these areas from the impact of any other activity jeopardizing the conservation of the features that characterize these particular habitats?
- Have research programs ever been carried out to investigate the status of these habitats? If yes, please indicate the responsible research institute and provide us with bibliographic references to retrieve the outputs of the program
- In relation to the REC.GFCM/33/2009/1 on the Establishment of a Fisheries Restricted Area in the Gulf of Lion to C) protect spawning aggregations and deep sea sensitive habitats in the following area:

42°40'N. 4°20' E: 42°40'N, 5°00' E; 43°00'N, 4°20' E; 43°00'N, 5°00' E;

- Has any vessel of your national fleet carried out fishing activities close by or inside the above mentioned area from 2006 to date?
- If yes, could you please provide us with the List of vessels operating in the area from 2006 to date (or for the years you have available)?
- Could you please provide us with the measure of catch and effort from 2006 to date (or for the years you have available) of the vessels which operated in the area?
- Has any national regulation been issued to comply with this recommendation? If yes, please include the name of the regulation
- D) In relation to fisheries restricted areas and fisheries restrictions in general (either spatial or seasonal) in high seas or in national waters is your Country planning to propose the establishment of a fisheries restricted area to the GFCM? If yes could you please give us information on the location and a brief description of the area?
- E) Additional comments on the topic of FRAs and marine protected areas from your side:

Annex D

#### Ouestionnaire 4

A) In relation to the REC.GFCM/30/2006/3 on the Establishment of fisheries restricted areas in order to protect the deep sea sensitive habitats in the following areas:

```
"Lophelia reef off Capo Santa Maria di Leuca"
```

```
39° 27.72' N, 18° 10.74' E
39° 27.80′ N, 18° 26.68′ E
39° 11.16' N, 18° 04.28' E
39° 11.16' N, 18° 32.58' E
```

#### "The Nile delta area cold hydrocarbon seeps"

```
31° 30.00' N, 33° 10.00' E
31° 30.00' N, 34° 00.00' E
32° 00.00' N. 34° 00.00' E
32° 00.00' N, 33° 10.00' E
"The Eratosthenes Seamount"
33° 00.00' N, 32° 00.00' E
```

33° 00.00' N, 33° 00.00' E 34° 00.00' N, 33° 00.00' E 34° 00.00' N, 32° 00.00' E

- Does any vessel of your national fleet carry out fishing activities close by or inside one of the above mentioned areas?
- Are you aware of any other activity being carried out in the above mentioned areas?
- Has any national regulation been issued to prohibit the fishing with towed dredges and bottom trawl nets and to protect the mentioned areas from the impact of any other activity jeopardizing the conservation of the features that characterize their particular habitats? If yes, please include the name of the regulation
- B) In relation to the FRA of "The Nile delta area cold hydrocarbon seeps":
  - Has the area been delimited (e.g. buoy, cords, etc.) by the appropriate authorities? If yes, please describe how
  - Is there any patrolling activity in place to control that fishing activities with towed dredges and bottom trawl nets are not occurring? If yes, please indicate the authority and the describe the control modalities
  - Is there any patrolling activity in place in order to protect these areas from the impact of any other activity jeopardizing the conservation of the features that characterize these particular habitats?
  - Have research programs ever been carried out to investigate the status of these habitats? If yes, please indicate the responsible research institute and provide us with bibliographic references to retrieve the outputs of the program
- In relation to the REC.GFCM/33/2009/1 on the Establishment of a Fisheries Restricted Area in the Gulf of Lion to C) protect spawning aggregations and deep sea sensitive habitats in the following area:

```
42°40'N. 4°20' E:
42°40'N, 5°00' E;
43°00'N, 4°20' E;
43°00'N, 5°00' E;
```

- Has any vessel of your national fleet carried out fishing activities close by or inside the above mentioned area from 2006 to date?
- If yes, could you please provide us with the List of vessels operating in the area from 2006 to date (or for the years you have available)?
- Could you please provide us with the measure of catch and effort from 2006 to date (or for the years you have available) of the vessels which operated in the area?
- Has any national regulation been issued to comply with this recommendation? If yes, please include the name of the regulation
- D) In relation to fisheries restricted areas and fisheries restrictions in general (either spatial or seasonal) in high seas or in national waters is your Country planning to propose the establishment of a fisheries restricted area to the GFCM? If yes could you please give us information on the location and a brief description of the area?
- E) Additional comments on the topic of FRAs and marine protected areas from your side:

#### Annex E

#### Ouestionnaire 5

A) In relation to the REC.GFCM/30/2006/3 on the Establishment of fisheries restricted areas in order to protect the deep sea sensitive habitats in the following areas:

```
"Lophelia reef off Capo Santa Maria di Leuca"
```

```
39° 27.72' N, 18° 10.74' E
39° 27.80′ N, 18° 26.68′ E
39° 11.16' N, 18° 04.28' E
39° 11.16' N, 18° 32.58' E
```

#### "The Nile delta area cold hydrocarbon seeps"

31° 30.00' N, 33° 10.00' E 31° 30.00' N, 34° 00.00' E 32° 00.00' N. 34° 00.00' E 32° 00.00' N, 33° 10.00' E "The Eratosthenes Seamount"

33° 00.00' N, 32° 00.00' E 33° 00.00' N, 33° 00.00' E 34° 00.00' N, 33° 00.00' E 34° 00.00' N, 32° 00.00' E

- Does any vessel of your national fleet carry out fishing activities close by or inside one of the above mentioned areas?
- Are you aware of any other activity being carried out in the above mentioned areas?
- Has any national regulation been issued to prohibit the fishing with towed dredges and bottom trawl nets and to protect the mentioned areas from the impact of any other activity jeopardizing the conservation of the features that characterize their particular habitats? If yes, please include the name of the regulation
- B) In relation to the FRA of "Lophelia reef off Capo Santa Maria di Leuca":
  - Has the area been delimited (e.g. buoy, cords, etc.) by the appropriate authorities? If yes, please describe how
  - Is there any patrolling activity in place to control that fishing activities with towed dredges and bottom trawl nets are not occurring? If yes, please indicate the authority and the describe the control modalities
  - Is there any patrolling activity in place in order to protect these areas from the impact of any other activity jeopardizing the conservation of the features that characterize these particular habitats?
  - Have research programs ever been carried out to investigate the status of these habitats? If yes, please indicate the responsible research institute and provide us with bibliographic references to retrieve the outputs of the program
- In relation to the REC.GFCM/33/2009/1 on the Establishment of a Fisheries Restricted Area in the Gulf of Lion to C) protect spawning aggregations and deep sea sensitive habitats in the following area:

42°40'N. 4°20' E: 42°40'N, 5°00' E; 43°00'N, 4°20' E; 43°00'N, 5°00' E;

- Has any vessel of your national fleet carried out fishing activities close by or inside the above mentioned area from 2006 to date?
- If yes, could you please provide us with the List of vessels operating in the area from 2006 to date (or for the years you have available)?
- Could you please provide us with the measure of catch and effort from 2006 to date (or for the years you have available) of the vessels which operated in the area?
- Has any national regulation been issued to comply with this recommendation? If yes, please include the name of the regulation
- D) In relation to fisheries restricted areas and fisheries restrictions in general (either spatial or seasonal) in high seas or in national waters is your Country planning to propose the establishment of a fisheries restricted area to the GFCM? If yes could you please give us information on the location and a brief description of the area?
- Additional comments on the topic of FRAs and marine protected areas from your side: E)