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



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**GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN**

**Thirty-second Session**

**Rome, Italy, 25-29 February 2008**

**MANAGEMENT OF MEDITERRANEAN FISHERIES**

**I. INTRODUCTION**

1. The management of fisheries under the General Fisheries Commission for the Mediterranean (GFCM) is essentially guided by the scientific and technical advice that the GFCM receives each year from its Scientific Advisory Committee (SAC) and the suggestions made by the Committee on Aquaculture (CAQ).

2. This document summarizes the main advice and conclusions that the SAC formulated in 2007, based on input from its subsidiary bodies, as set out in the report of its 10th session (GFCM:XXXII/2008/Inf.5). It also refers to the draft Recommendation on Minimum Standards for the Establishment of a Satellite Vessel Monitoring System (VMS) in the GFCM Area, and the recommendations that the International Commission for the Conservation of Atlantic Tunas (ICCAT) adopted in 2007 concerning fisheries in the Mediterranean.

**II. SUGGESTIONS AND ADVICE OF THE SCIENTIFIC ADVISORY COMMITTEE**

3. On the basis of the main conclusions and suggestions issued by its subsidiary bodies, the SAC has approved the following recommendations:

**Collection of information and statistics**

4. The SAC endorsed the advice on the collection of statistical data and information as formulated by its sub-committees. It drew the Commission's attention to the importance of promptly transmitting Task 1 data, as specified in Resolution GFCM/31/2007/1.

5. The SAC also asked the Commission to:

- Set 30 June as the deadline for submission of Task 1 data for the preceding year and to envisage amending resolution GFCM/31/2007/1 as a consequence;
- Examine the possibility of holding an *ad hoc* Workshop on the GFCM Regional Fleet Register in early 2008;

- Implement a period of practical testing of the "geographical sub-area (GSA) compatible" STATLANT 37A form;
- Refine the Fishery and Ecosystem Information System (FEIS) at regional level, under the responsibility of the GFCM secretariat;
- Implement a programme of work for further development of MEDSTAT for the countries concerned, giving priority to the fleet register;
- Consider the standardized measurement of fishing effort by operational unit (OU) as a priority, noting that the calibration of fishing effort of different gears will occur in a second stage, after the first round of data has been collected and compiled under GFCM Task 1.

### **Monitoring fish stocks and fisheries management measures**

6. The SAC endorsed the outcome of the transversal workshops, especially as concerns the use of trawl surveys for fisheries management. It highlighted the importance of promoting the use of the data from the surveys.

7. As regards the evaluation of fish stocks, the SAC reviewed the results of 22 assessments of 14 demersal stocks (including one shared stock) and 14 small pelagic stocks, including four shared stocks, covering 10 species and 12 GSAs located mostly in the western and central parts of the Mediterranean.

8. On the basis of available scientific information on the status of the assessed stocks, subregion by subregion, the SAC endorsed the management advice on selected demersal and small pelagic species. The advice is summarized in Annex A of this document. The main suggestions that can be presented as recommendations or resolutions are listed below, for demersal and small pelagic species respectively:

#### ***Demersal species:***

##### **Hake (*Merluccius merluccius*)**

- Reduce fishing time at sea by 20% in GSA 5;
- Reduce fishing effort by 20% in GSA 6;
- Apply the 40 mm square mesh in the codend of trawl net in GSAs 5 and 6.

##### **Striped red mullet (*Mullus surmuletus*)**

- Do not increase fishing effort in GSAs 5, 12, 13 and 14;
- Apply the 40 mm square mesh in the codend of trawl net in GSA 5.

##### **Blue and red shrimp (*Aristeus antennatus*)**

- Reduce current fishing effort by 10% and apply the 40 mm square mesh in the codend of trawl net in GSA 6.

**Red coral** (*Corallium rubrum*)

In GSA 6,

- Gradually reduce the number of licences to allow recovery over the next 5-10 years;
- Revise downwards the current allowed quota (400 kg per fisherman/year);
- Close the fishery from 15 June to 31 August (reproductive period).

**Common dentex** (*Dentex dentex*)

- Do not increase fishing effort in GSAs 12 and 13.

**Sole** (*Solea solea*)

- Do not increase fishing effort above the 2006 level in GSA 17.

**Small pelagics:****Anchovy** (*Engraulis encrasicolus*)

- Do not increase current fishing effort in GSAs 1, 6, 17, 18 and 22;
- Change the closed period or introduce local closures in GSA 1;
- Maintain the current closed areas and periods in GSA 6;
- Change the closed period (currently mid-December to end of February) in the North-West part of GSA 22.

**Sardine** (*Sardina pilchardus*)

- Do not increase current fishing effort in GSAs 1, 6, 7, 17, 18 and 22 (North-West part);
- Change the closed period (currently mid-December to end of February) in GSA 22.

9. The SAC again underscored the importance of providing relevant information concerning, for example, fishing mortality and current fishing effort (capacity, operational unit), including pertinent indicators and reference point values in the case of advice on the monitoring of fishing effort. It also reiterated the need to specify the relationship between fishing effort and fishing mortality, as appropriate, especially for stocks whose abundance varies sharply from one year to another.

10. The SAC invited the SCSA to include a definition of the descriptors in the summary of evaluations and to include the indicators and reference points for the descriptor when these were available. It also underscored the need for the joint stock assessments for 2008 to concentrate on Hake (*Merluccius merluccius*) and associated species.

**Priority species and shared stocks**

11. Consideration could be given to formally adopting the lists of priority species and shared stocks, given the SAC's progress in defining and identifying criteria for updating those lists.

## Socio-economic aspects of fisheries

12. The SAC emphasized the importance of ensuring appropriate monitoring of recreational fisheries which it defined as follows:

*Leisure/recreational fisheries – non-commercial fishing (i.e. not involving sale, barter or trade) pursued from personal interest as recreation, tourism or sport. In recreational fisheries, catches are released or retained for private consumption. There are three categories of leisure/recreational fisheries:*

- *Amateur fishing – unorganized fishing practiced as a hobby and not associated with specific events or competitions.*
- *Sport fishing – organized fishing involving open competition between fishermen to catch the largest fish of selected species, the largest number of specimens or the highest total weight, following the rules of each competition.*
- *Tourism fishing – fishing conducted by commercial fishermen ('fishing tourism') or by recreational fishing professionals who can be considered as third parties organizing fishing expeditions for tourists.*

13. The SAC confirmed the need to conduct bioeconomic studies of the behaviour of fishermen and resources, in relation to the regulation on the 40 mm square mesh. It noted the merit in applying the "traffic light" method for integrated analysis of indicator trends, including the use of reference points to facilitate the monitoring of fisheries management.

14. The Committee approved the following main recommendations of the SCESS:

- Identification of data sources for Task 1 indicators, requiring annual data collection;
- Establishment of an *ad hoc* Transversal Working Group on Recreational Fisheries;
- Examination of the role of incentive structures and mechanisms in national fisheries;
- Analysis of the impact of market forces on fisheries management, including the use of disaggregated information (price/species) to analyse their impact on fishing effort;
- Conduct of case studies on the impact of adopting the 40 mm square mesh, notably in Libya, Morocco and Tunisia.

## Aspects relating to the environment and marine ecosystems

15. The SAC noted the progress made in defining restricted fishing zones and promoting implementation of the Ecosystem Approach to Fisheries (EAF) and Marine Protected Areas (MPAs), and the studies on selectivity of fishing gear.

16. The SAC approved the following suggestions:

- Adoption of a standard format for submission of new proposals for restricted fishing zones in the Mediterranean (Annex B);
- Meeting of the Transversal Working Group on Bycatches and Incidental Catches in 2008;
- Study of impacts on sensitive seabeds and habitats, with special attention to the continental slope bottom and sub-marine meadows;
- Drafting of an evaluation report on the effectiveness of MPAs in the Mediterranean as a tool for fisheries management and conservation of biodiversity;

- Identification of sensitive habitats of priority species, by GSA; and
- Establishment of a Transversal Working Group on Selectivity, reporting to the SCMEE.

### **III. DRAFT RECOMMENDATION ON MINIMUM STANDARDS FOR THE ESTABLISHMENT OF A SATELLITE VESSEL MONITORING SYSTEM IN THE GFCM AREA**

17. At its thirty-first session in Rome (January 2007), the Commission discussed a European Community proposal on minimum standards for the establishment of a satellite vessel monitoring system (VMS) in the GFCM area. The recommendation was sent for re-examination at the thirty-second session of the Commission. The draft recommendation is reproduced in document GFCM:XXXII/2008/Inf.7.

### **IV. ICCAT RECOMMENDATIONS OF RELEVANCE FOR THE MEDITERRANEAN**

18. The International Commission for the Conservation of Atlantic Tunas (ICCAT) adopted a number of recommendations at its 20<sup>th</sup> Session (Antalya, Turkey, November 2007), including those below concerning the Mediterranean (reproduced in full in GFCM:XXXII/2008/Inf. 8):

- Recommendation of the ICCAT on Mediterranean swordfish [Rec. 07-01]
- Recommendation of the ICCAT on compliance with the multi-annual recovery plan for bluefin tuna in the eastern Atlantic and Mediterranean [Rec. 07-04]

### **V. SUGGESTED ACTIONS FOR THE COMMISSION**

19. The Commission is invited to examine and endorse, as appropriate, the conclusions, recommendations and advice received from its Scientific Advisory Committee.

20. The Commission is also invited to re-examine, for possible adoption, the draft recommendation on the VMS and the recommendations that the ICCAT adopted in 2007 concerning the Mediterranean.

## APPENDIX A

**SUMMARY TABLE RELATIVE TO THE MANAGEMENT ADVICE FROM THE  
SCIENTIFIC ADVISORY COMMITTEE (SAC)**

**Demersal species**

<b>GSA</b>	<b>Stock</b>	<b>Stock status</b>	<b>SAC management advice</b>	<b>Comment</b>
<b>GSA 05</b>	<b>Hake</b> ( <i>Merluccius merluccius</i> )	<ul style="list-style-type: none"> <li>▪ fishing mortality considered as moderate;</li> <li>▪ intermediate abundance and slight growth overexploitation</li> </ul>	<ul style="list-style-type: none"> <li>▪ reduction of fishing by 20 percent of time at sea;</li> <li>▪ use of 40 mm square mesh size in the cod-end to increase length at first capture from 11 (diamond mesh size) to 15 cm, without a significant decrease in commercial yields</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort level</li> </ul>
<b>GSA 05</b>	<b>Striped red mullet</b> ( <i>Mullus surmuletus</i> )	<ul style="list-style-type: none"> <li>▪ moderate fishing mortality;</li> <li>▪ intermediate abundance;</li> <li>▪ fully exploited (Y/R very close to the maximum and B<sub>now</sub> is about 33.5 percent B<sub>virgin</sub>)</li> </ul>	<ul style="list-style-type: none"> <li>▪ not to increase the fishing effort, especially in the trawl fishery;</li> <li>▪ the 40 mm square mesh should be implemented</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort level</li> </ul>
<b>GSA 06</b>	<b>Deep-water rose shrimp</b> ( <i>Parapenaeus longirostris</i> )	<ul style="list-style-type: none"> <li>▪ annual landings for 2006 (51 tons) recorded as the lowest value of the used historical series (2001-2006);</li> <li>▪ fishing mortality moderate;</li> <li>▪ low abundance;</li> <li>▪ low levels of recruitment and of the SSB</li> </ul>	<ul style="list-style-type: none"> <li>▪ new analysis should be presented at the next SCSA</li> </ul>	
<b>GSA 06</b>	<b>Red shrimp</b> ( <i>Aristeus antennatus</i> )	<ul style="list-style-type: none"> <li>▪ high fishing mortality;</li> <li>▪ low abundance;</li> <li>▪ overexploited stock (exploited at above sustainable level in the long term, with no potential room for</li> </ul>	<ul style="list-style-type: none"> <li>▪ reduction of 10 percent of the current fishing effort (8942 fishing days for a fleet of 130 vessels) to recover SSB;</li> <li>▪ the 40mm square mesh should be implemented</li> </ul>	<ul style="list-style-type: none"> <li>▪ fine tune analysis to facilitate decision making</li> </ul>

GSA	Stock	Stock status	SAC management advice	Comment
		further expansion and a high risk of stock depletion/collapse)		
<b>GSA 06</b>	<b>Hake</b> ( <i>Merluccius merluccius</i> )	<ul style="list-style-type: none"> <li>▪ high fishing mortality;</li> <li>▪ low abundance;</li> <li>▪ overexploited stock (being exploited at above a sustainable level in the long term, with no potential room for further expansion and a high risk of stock depletion/collapse)</li> </ul>	<ul style="list-style-type: none"> <li>▪ reduction by 20 percent of the fishing effort and the use of the 40 mm square mesh for bottom trawls;</li> <li>▪ not to increase the fishing effort of the small-scale fishery</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort level</li> </ul>
<b>GSA 06</b>	<b>Red coral</b> ( <i>Corallium rubrum</i> )	<ul style="list-style-type: none"> <li>▪ high fishing mortality;</li> <li>▪ low abundance;</li> <li>▪ overexploited stock (being exploited at above a level which is believed to be sustainable in the long term, with no potential room for further expansion and a high risk of stock depletion/collapse)</li> </ul>	<ul style="list-style-type: none"> <li>▪ progressive reduction of number of licenses to allow recovery within the next 5-10 years (through not issuing new licenses in replacement of existing ones);</li> <li>▪ review of the current allowed quota (400 kg per year/fisherman);</li> <li>▪ closure of the fishery from 15 June to 31 August (reproductive period)</li> </ul>	
<b>GSAs 12, 13, 14</b>	<b>Striped red mullet</b> ( <i>Mullus surmuletus</i> )	<ul style="list-style-type: none"> <li>▪ low fishing mortality rate for the northern and eastern stocks;</li> <li>▪ moderate fishing mortality rate for the southern stock</li> </ul>	<ul style="list-style-type: none"> <li>▪ not to increase the fishing effort</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort level</li> </ul>
<b>GSAs 12, 13</b>	<b>Common dentex</b> ( <i>Dentex dentex</i> )	<ul style="list-style-type: none"> <li>▪ in GSA 12, the stock seems to be under-exploited;</li> <li>▪ in GSA 13, the stock seems to be in optimal conditions</li> </ul>	<ul style="list-style-type: none"> <li>▪ not to increase the fishing effort in both GSAs</li> </ul>	<ul style="list-style-type: none"> <li>▪ this fishery should be closely monitored</li> </ul>
<b>GSA 17</b>	<b>Sole</b> ( <i>Solea solea</i> )	<ul style="list-style-type: none"> <li>▪ fishing pressure by <i>rapido</i> trawlers and set netters increased in the last ten years in terms of either fishing effort, efficiency of the gears and exploitation of new fishing grounds;</li> </ul>	<ul style="list-style-type: none"> <li>▪ not to increase the fishing effort in respect to 2006 level</li> </ul>	<ul style="list-style-type: none"> <li>▪ the number of vessels fishing with <i>rapido</i> trawl should be provided</li> </ul>

GSA	Stock	Stock status	SAC management advice	Comment
		<ul style="list-style-type: none"> <li>▪ intermediate abundance;</li> <li>▪ fully exploited</li> </ul>		

### Small pelagics species

GSA	Stock	Stock status as formulated by SCSA	SAC management advice	Comment
<b>GSA 01</b>	<b>Anchovy</b> ( <i>Engraulis encrasicolus</i> )	<ul style="list-style-type: none"> <li>▪ low levels of biomass, recruitment and catch from 2003 to 2006</li> </ul>	<ul style="list-style-type: none"> <li>▪ not to increase the current fishing effort;</li> <li>▪ in order to protect the juveniles it is necessary to shift the closed season or to introduce local closures</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort level</li> </ul>
<b>GSA 01</b>	<b>Sardine</b> ( <i>Sardina pilchardus</i> )	<ul style="list-style-type: none"> <li>▪ moderate fishing mortality;</li> <li>▪ intermediate abundance;</li> <li>▪ Fully exploited</li> </ul>	<ul style="list-style-type: none"> <li>▪ not to increase the fishing effort beyond the current levels</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort level</li> </ul>
<b>GSA 06</b>	<b>Anchovy</b> ( <i>Engraulis encrasicolus</i> )	<ul style="list-style-type: none"> <li>▪ low level of biomass (2006 estimates are, however, twice that of 2005)</li> </ul>	<ul style="list-style-type: none"> <li>▪ not to increase the fishing effort beyond current level;</li> <li>maintain the current closed areas and seasons.</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort data</li> </ul>
<b>GSA 06</b>	<b>Sardine</b> ( <i>Sardina pilchardus</i> )	<ul style="list-style-type: none"> <li>▪ high fishing mortality;</li> <li>▪ fully exploited;</li> <li>▪ intermediate abundance</li> </ul>	<ul style="list-style-type: none"> <li>▪ not to increase the fishing effort beyond the current levels</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort level</li> </ul>
<b>GSA 07</b>	<b>Anchovy</b> ( <i>Engraulis encrasicolus</i> )	<ul style="list-style-type: none"> <li>▪ intermediate abundance;</li> <li>▪ the biomass estimate for 2006 increased as well as production in the first 6 months of 2007. The level of biomass is, however, considered not to be high</li> </ul>	<ul style="list-style-type: none"> <li>▪ follow with a great attention the gradual changes in all indicators of Stock status, including through strengthening scientific cooperation, especially joint surveys, between Spain and France to update biological data as well as catch and effort data</li> </ul>	

GSA	Stock	Stock status as formulated by SCSA	SAC management advice	Comment
<b>GSA 07</b>	<b>Sardine</b> ( <i>Sardina pilchardus</i> )	<ul style="list-style-type: none"> <li>▪ intermediate abundance</li> </ul>	<ul style="list-style-type: none"> <li>▪ not to increase the fishing effort;</li> <li>▪ reinforce cooperation between Spain and France to update biological data as well as catch and effort data with the view to assess shared stocks.</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort level</li> </ul>
<b>GSA 16</b>	<b>Anchovy</b> ( <i>Engraulis encrasicolus</i> )	<ul style="list-style-type: none"> <li>▪ high fishing mortality;</li> <li>▪ low abundance;</li> <li>▪ decrease of the biomass estimate by 80 percent from 2005 to 2006</li> </ul>	<ul style="list-style-type: none"> <li>▪ monitor the fishery and adapt the fishing effort to the size of the stock given by the acoustic data.</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort level</li> </ul>
<b>GSA 16</b>	<b>Sardine</b> ( <i>Sardina pilchardus</i> )	<ul style="list-style-type: none"> <li>▪ moderate fishing mortality;</li> <li>▪ low abundance;</li> <li>▪ the decrease of the biomass estimate by 74 percent from 2005 to 2006 is noted with concern</li> </ul>	<ul style="list-style-type: none"> <li>▪ monitor the fishery and adapt the fishing effort to the size of the stock given by the acoustic data.</li> </ul>	
<b>GSA 17</b>	<b>Anchovy</b> ( <i>Engraulis encrasicolus</i> ) (stock assessed jointly by Italy, Slovenia and Croatia)	<ul style="list-style-type: none"> <li>▪ moderate exploitation rate (values in recent years are lower than 0.4 which is a precautionary reference point. The mean ratio of the last three years between catch and estimated biomass is 0.25);</li> <li>▪ The biomass dropped at very low level in 1987 and is recovering although with a fluctuation pattern until now</li> </ul>	<ul style="list-style-type: none"> <li>▪ not to increase the fishing effort</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort level</li> </ul>
<b>GSA 17</b>	<b>Sardine</b> ( <i>Sardina pilchardus</i> )	<ul style="list-style-type: none"> <li>▪ Mean exploitation rate higher than 0.4 in</li> </ul>	<ul style="list-style-type: none"> <li>▪ not to increase the fishing effort</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort level</li> </ul>

GSA	Stock	Stock status as formulated by SCSA	SAC management advice	Comment
	(stock assessed jointly by Italy, Slovenia and Croatia)	the most recent years, while in 2006, it was estimated at 0.38, lower than the limit of 0.4 (precautionary reference point). The mean ratio of the last three years between catch and estimated biomass is 0.23; <ul style="list-style-type: none"> <li>▪ fully exploited</li> </ul>		
<b>GSA 18</b> (Western part)	<b>Anchovy</b> ( <i>Engraulis encrasicolus</i> )	<ul style="list-style-type: none"> <li>▪ intermediate level of abundance</li> </ul>	not to increase the current level of fishing effort on small pelagic fish	<ul style="list-style-type: none"> <li>▪ provide fishing effort level</li> </ul>
<b>GSA 18</b> (Western part)	<b>Sardine</b> ( <i>Sardina pilchardus</i> )	<ul style="list-style-type: none"> <li>▪ low level since 1998.</li> <li>▪ 2006 estimated biomass at 36867 tons. The large variability in time and space is however mostly attributable to environmental factors</li> </ul>	<ul style="list-style-type: none"> <li>▪ not to increase the actual level of fishing effort</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort level</li> </ul>
<b>GSA 22</b> (North-Western part)	<b>Anchovy</b> ( <i>Engraulis encrasicolus</i> )	<ul style="list-style-type: none"> <li>▪ high fishing mortality;</li> <li>▪ intermediate abundance (decreasing trend in the total anchovy biomass and in the SSB up to 2005 but an increase in 2006 both of total biomass and SSB, indicating signs of stock recovery, although both are still at a rather low level)</li> </ul>	<ul style="list-style-type: none"> <li>▪ not to increase the fishing effort beyond the current levels. This should allow maintaining the current levels of fishing mortality;</li> <li>▪ Shifting the closed period (present: mid-December to end of February).</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort level;</li> <li>▪ precise the new closed period.</li> </ul>
<b>GSA 22</b> (North-	<b>Sardine</b> ( <i>Sardina</i>	<ul style="list-style-type: none"> <li>▪ intermediate abundance</li> </ul>	<ul style="list-style-type: none"> <li>▪ for precautionary reasons, not to</li> </ul>	<ul style="list-style-type: none"> <li>▪ provide fishing effort level;</li> </ul>

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GSA	Stock	Stock status as formulated by SCSA	SAC management advice	Comment
Western part)	<i>pilchardus)</i>		increase the fishing effort on sardine and anchovy (sardine constitute with anchovy, one fishery); ▪ shift of the closed period (present: mid-December to end of February).	▪ precise the new closed period.

**APPENDIX B**

**STANDARD FORMAT FOR THE SUBMISSION OF PROPOSALS FOR GFCM  
FISHERIES RESTRICTED AREAS (FRA) IN THE MEDITERRANEAN**

**Name of the FRA:**

**Submitted by (Institution, Scientists, GFCM Members...):**

**Date of submission:**

**1. EXECUTIVE SUMMARY (maximum 500 words)**

Supply a summary of the information contained in sections 2 to 8, including the expected results.

**2. AREA IDENTIFICATION**

**2.1 GFCM GEOGRAPHICAL SUB-AREA**

<http://www.gfcm.org/fi/website/GFCMRetrieveAction.do?dom=topic&fid=16162>

**2.2 NAME OF THE FRA**

**2.3 GEOGRAPHICAL LOCATION**

**2.3.1 General location**

**2.3.2 Precise location of the proposed core area: provide geographical coordinates (latitude and longitude in degrees, minutes and seconds) for the vertex of a polygonal area**

**2.3.3. Buffer area (if applicable), provide geographical coordinates (latitude and longitude in degrees, minutes and seconds) for the vertex of a polygonal area**

**2.3.4. Location Map: include geographical coordinates of the core and buffer areas, bathymetry, and the boundary of international waters. Add a global reference map of the Mediterranean with the location of the site**

**2.3.5. Depth range (in m; specify core and buffer area, if applicable)**

**2.4 SURFACE AREA (in ha and km<sup>2</sup>; specify core and buffer area if applicable)**

**3. SITE DESCRIPTION**

**3.1 MAIN PHYSICAL FEATURES**

**3.1.1. Geology/Geomorphology**

Give a brief description of the geological aspects; processes of sedimentation and erosion observable in the area and other geomorphologic features. Geological risks. Indicate bibliographical sources.

**3.1.2. Other interesting physical or chemical features:** such as hydrodynamics, frontal areas, upwelling, etc. that support the proposal

### 3.2 BIOLOGICAL FEATURES

**3.2.1. Habitats: a brief description of the dominant marine habitats including pelagic ones if applicable**

#### 3.2.2. List of regionally important species

List here those marine species protected by international agreements (specify the agreement) and/or included in the GFCM priority list. If applicable, give the IUCN category. Any other species may be listed if it is clearly considered of regional importance given its high representation in the area. For each species state:

- a. its relative abundance as Common (C), Uncommon (U) or Occasional (O):
- b. its regional status are rare (r), endemic (e) and/or threatened (t); and
- c. its status as an important resident population (R), or important for its breeding (B), feeding (F), wintering (W) or migratory passage (M)

<b>SPECIES</b>	<b>Relative Abundance (C) (U) (O)</b>	<b>Regional STATUS (r) (e) (t)</b>	<b>Local STATUS (R) (B) (F) (W) (M)</b>

**3.2.3. Occurrence of biological and ecological processes relevant to fish resources (Essential fish habitats)**

### 3.3 USE OF NATURAL RESOURCES

#### 3.3.1. Current fishing use and development of fisheries

- a. Briefly describe the current use of the area by artisanal, industrial and recreational fishing.

b. Enter how many of the users depend on these resources, seasonality, and assessment of the social and economic importance of their use and of the perceived impact on the conservation of the area, in a score of 0-1-2-3 (meaning null, low, medium, high).

ACTIVITY AND CATEGORY	ASSESS IMPORTANCE OF SOCIO-ECONOMIC CONSERVATION IMPACT	ESTIMATED No. OF USERS	SEASONALITY
<b>FISHING</b>			
Artisanal	0 1 2 3      0 1 2 3		
Industrial	0 1 2 3      0 1 2 3		
Other:			
• Aquaculture			
•			

### 3.2.2. Current human use and development (except for fisheries)

a. Briefly describe the current use of the area by other economic sectors

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b. Enter how many of the users depend on these resources, seasonality, and assessment of the social and economic importance of their use and of the perceived impact on the conservation of the area, in a score of 0-1-2-3 (meaning null, low, medium, high).

ACTIVITY AND CATEGORY	ASSESS IMPORTANCE OF SOCIO-ECONOMIC CONSERVATION IMPACT	ESTIMATED No. of users	SEASONALITY
<b>OTHER ACTIVITIES</b>			
Tourism	0 1 2 3		
Transport	0 1 2 3		
Mining			
-			
-			

## 4. REGIONAL IMPORTANCE OF THE SITE

This Section aims at stressing the importance of the site for conservation at the regional scale.

### 4.1 PRESENCE OF ECOSYSTEMS/HABITATS OF PARTICULAR IMPORTANCE IN THE MEDITERRANEAN

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### 4.2 PRESENCE OF HABITATS THAT ARE CRITICAL TO ENDANGERED, THREATENED OR ENDEMIC SPECIES

Name the habitat types and the species linked to it. Give information about its status (IUCN classification, etc.)

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### 4.3 OTHER RELEVANT FEATURES

#### 4.3.1. Educational Interest

e.g. particular values for activities of environmental education or awareness

#### 4.3.2. Scientific Interest

Explain if the site represents a particular value for research.

## 5. IMPACTS AND ACTIVITIES AFFECTING THE AREA

### 5.1 IMPACTS AND ACTIVITIES WITHIN THE SITE

#### 5.1.1. Exploitation of natural resources

Assess if the current rates of exploitation of natural resources within the area (e.g. fishing, sand and mineral exploitation) are deemed unsustainable in quality or quantity, and try to quantify these threats, e.g. the percentage of the area under threat, or any known increase in extraction rates.

#### 5.1.2 Threats to habitats and species

Mention any serious threats to the habitat (e.g. modification, disturbance, pollution) or to species (e.g. disturbance, poaching, introduced alien species...) within the area.

### 5.2 IMPACTS AND ACTIVITIES AROUND THE SITE

#### 5.2.1. Pollution

Name and describe sources of pollution.

#### 5.2.2. Other external threats, natural and/or anthropogenic

Briefly describe any other external threat to the ecological, biological, aesthetic or cultural values of the area (such as unregulated exploitation of natural resources, serious threats on habitats or species, pollution problems) likely to influence the area in question.

**5.2.3. Sustainable development measures**

Comment whether the area is covered by a management plan or bordering upon a zone under such a plan.

**6. EXPECTED DEVELOPMENT AND TRENDS<sup>1</sup>**

This is not always easy to assess and thus, it is not obligatory to fill in this Section.

**6.1 EXPECTED DEVELOPMENT AND TRENDS OF THREATS TO AND PRESSURES UPON THE AREA**

Deal briefly with the development of economic activities within the area

**7. MANAGEMENT AND PROTECTION REGIME****7.1 LEGAL STATUS (if applicable)****7.1.1. Historical background of the management related to the area****7.1.2. Regulatory framework currently ruling the management of the site**

Mention if the area, or part of it, has been designated and on what date, with an international or regional convention.

**7.1.3. Objectives**

Name in order of importance the objectives of the area as stated in its legal declaration.

**7.2 LEGAL BACKGROUND**

Briefly mention if the area or part of it is subject to any legal claim, or to any file open in that connection within the framework of an international body.

<sup>1</sup> By expected development and trends are meant the development, which is thought most likely to occur in the absence of any deliberate intervention to protect and manage the site.

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### **7.3 LEGAL PROVISIONS FOR MANAGEMENT**

#### **7.3.1. Zoning regulating the area**

Briefly state if the legal text protecting the area provides for different zones to allocate different management objectives of the area (e.g. core and scientific zones, fishing zones, etc.) and in case this the surface area of these zones. Include a map as an annex.

#### **7.3.2. Legal competencies**

Legal competence and responsibility with regard to administration and implementation of regulatory measures.

#### **7.3.3. Other legal provisions**

Describe any other relevant legal provisions, such as those requiring a management plan or any other significant measures concerning the protection and management of the area.

## **8. OBJECTIVES OF THE FRA AND PROPOSED MANAGEMENT MEASURES**

### **8.1 OBJECTIVES OF THE FRA**

State the reasons that justify the designation of the FRA

### **8.2 PROPOSED PROTECTION MANAGEMENT MEASURES FOR THE FRA**

#### **8.2.1. Management measures**

Suggest management measures to be implemented in the FRA

#### **8.2.2. Monitoring, Control and Surveillance measures**

Suggest measures to effectively enforce the FRA

**8.2.3. Socio-economic impact(s) of the FRA**

Prevision of the socio-economic impact(s) of the proposed measures

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**8.2.3.1. Economic evaluation of the ecosystems services (not only marketable)**

Economic value of the goods and services that the ecosystem supports

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**9. OTHER RELEVANT INFORMATION**

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**10. RELEVANT ADDRESSES**

(Stakeholders (if applicable) or name(s), position(s) and contact address(es) of the person(s) that compiled the report and/or can provide further information).

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