



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



**GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN**

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**PROGRAMME OF WORK OF THE SCIENTIFIC ADVISORY  
COMMITTEE FOR THE INTERSESSIONAL PERIOD 2010**

## INTRODUCTION

1. This document summarizes the programme of work of the Scientific Advisory Committee, as identified by the twelfth session of SAC (January, 2010). It is advisable that budgetary implications are taken into consideration when reviewing the proposed programme, whilst referring to the preliminary forecasted budget presented in document GFCM: XXXIV/2010/Inf.5. The activities within the programme are to be undertaken by Members at national level, the Scientific Advisory Committee (SAC) and the SAC Subsidiary bodies.

## PROVISIONAL PROGRAMME OF THE SCIENTIFIC ADVISORY COMMITTEE.

2. Set out below are the proposed lists of activities for the intersessional period 2010 as identified by the four SAC Sub-Committees and reviewed and completed by the SAC at its 12<sup>th</sup> Session. Draft terms of reference (TOR) for certain activities are given in Appendix A; others will be finalised by the Coordinating Meeting of the Sub-Committees (CMSC) to be held in May 2010.

### Stock Assessment

- Pursue activities on stock assessment using both commercial data and surveys at sea.
- Pursue the work aimed at developing a GFCM protocol for undertaking surveys at sea.
- Improve knowledge on biology, life history parameters and stock structure, including the spatial location of nurseries and spawning areas.
- Agree on a set of biological parameters to be used for the stock assessments in the Mediterranean and Black Sea, either by GSA or by merging adjacent GSAs.

- Draw up and include additional sheets, related to survey-based assessment methods, in the assessment form.
- Improve biological indicators and further develop reference points with the view to evaluate the status of the stocks and fisheries including the effects on exploited stocks within FRAs.
- Organize the meetings of the Working Groups on stock assessment of demersal and small pelagic resources, considering the new functioning approach.
- Carry out a review of the current scenario and knowledge on age reading in the GFCM area.
- Contribute to the implementation of the medium-term working program to improve knowledge and to assess the status of the stock of elasmobranches.
- Contribute to the performance of case studies on the implementation of the minimum mesh size of 40 mm (square mesh) or 50 mm (diamond mesh) in demersal fisheries, as well as on the Ecosystem Approach to Fisheries (EAF).
- Collate information on the stocks of *Anguilla anguilla*.

### **Marine Environment and Ecosystems**

- Identification of sensitive habitats for each GFCM priority species, to be submitted to the next SCMEE meeting.
- Preparation of a detailed form for data collection on the bycatch of endangered species, to be included in the Task 1 system.
- Update the knowledge on artificial reefs.
- Organization of a workshop on alien species and their interaction with fisheries, back-to-back with the SCMEE meeting.
- Organization of a transversal workshop on selectivity improvement, bycatch reduction and alternative gears.
- Implementation of the programme on elasmobranch species, including an expert meeting and training course. The detailed proposal related to this program is presented in Appendix B.
- Contribute to the performance of case studies on the implementation of the minimum mesh size of 40 mm (square mesh) or 50 mm (diamond mesh) in demersal fisheries, as well as on the Ecosystem Approach to Fisheries (EAF).

### **Statistics and Information**

- Organization of a workshop on data collection methods applied to all segments of the fleet, and their coherence with the requirements of the GFCM Task 1 (see Appendix A I for Terms of Reference).
- Carry out further analysis on the optimum weight threshold for the reporting of catches in the GFCM logbook.
- After reception by the GFCM Secretariat of the Task 1.1, 1.2, and 1.4 datasets:
  - Update the statistical bulletin accordingly;
  - Work on proposing data summary outputs and data access functions to be presented at the next SCSI meeting;
  - Work on a data policy in relation to the Task 1 dataset.

### Economic and Social Sciences

- Constitution of an expert network for the analysis on the fishers' social structure across all Mediterranean countries, along with the compilation of studies through email exchange.
- Opening of a section in the GFCM website to contain all related studies on the impact of changes in the cost of energy.
- Organization of a Workshop on Monitoring Recreational Fisheries in the GFCM area.
- Contribute to the performance of case studies on the implementation of the minimum mesh size of 40 mm (square mesh) or 50 mm (diamond mesh) in demersal fisheries, as well as on the Ecosystem Approach to Fisheries (EAF).
- Carry out further economic analysis on the impact of fuel prices and reduction in CO<sub>2</sub> emissions and collect information on potential technologies and methods to decrease fuel consumption.

### Other transversal issues

- Launch a working program to improve knowledge and assess the state of red corals in the Mediterranean, starting with the organisation of a workshop to review the available information on the biology, fishery, regulations and existing management plans for this species in the Region (See Appendix A II for Terms of Reference).
- Follow up on the request by twenty-seventh session of SAC to report on the geographical occurrence and seasonality extent and effects of mucilaginous algal blooms. A workshop is to be organised during the intersessional period to address this subject (See Appendix A III for Terms of Reference).
- Convene a workshop on technical aspects related to the implementation of VMS and the use of related data.
- In line with article 4 of GFCM Recommendation GFCM/2006/2, SAC should analyse in 2010 the impact of the establishment of a closed season for the FAD dolphinfish fisheries on the stocks of this species and to recommend any change that may be deemed necessary to improve its effectiveness, in order to evaluate possible modifications to the closure and/or to propose additional management measures.

### Meetings of the SAC and its subsidiary bodies

3. The Scientific Advisory Committee proposed that the following meetings be convened during the intersessional period:

Meeting	Place/Date
Thirteenth Session of the SAC (5 days)	France/ January 2011
Transversal Workshop on VMS data (2-3 days)	Morocco/TBD
Tranversal Workshop on red coral (2-3 days)	TBD/TBD
Session of the SCSA (4 days)	Malta/ 29 <sup>th</sup> November – 2 <sup>nd</sup> December 2010

Meeting	Place/Date
Working Group on stock assessment of demersal species (6-7 days)	Istanbul, Turkey/ October 2010
Working Group on stock assessment of small pelagic species (6-7 days)	Mazzara del Vallo, Italy/ October 2010
Session of the <b>SCESS</b> (4 days)	Malta/ 29 <sup>th</sup> November – 2 <sup>nd</sup> December 2010
Workshop on monitoring recreational fisheries in the GFCM area (3 days)	Palma de Mallorca, Spain/TBD
Session of the <b>SCSI</b> (4 days)	Malta/ 29 <sup>th</sup> November – 2 <sup>nd</sup> December 2010
Workshop on data collection methods applied to all segments of the Fleet and their coherence with the requirements of the GFCM Task 1 (3 days)	Rome, Italy/TBD
Session of the <b>SCMEE</b> (4 days)	Malta/ 29 <sup>th</sup> November – 2 <sup>nd</sup> December 2010
Workshop on alien species and their interaction with fisheries (back-to-back with the SCMEE meeting)	Malta/29 <sup>th</sup> November 2010
Transversal Workshop on selectivity improvement, bycatch reduction and alternative gears (3 days)	Egypt/TBD
First Expert Meeting on the status of elasmobranches in the Mediterranean and the Black Sea (4 days)	Tunisia/TBD
Training course on age reading and growth parameters of the main elasmobranch species (5 days)	TBD/TBD
Workshop on algal and jelly fish blooms (3-4 days)	Istanbul/TBD
1 <sup>st</sup> Session of the <b>CMSC</b> (2 days)	Rome, Italy 3-4 May 2010
2 <sup>nd</sup> Session of the <b>CMSC</b> (1 day)	Malta/ 3 <sup>rd</sup> December 2010

#### SUGGESTED ACTION BY THE COMMISSION

4. The Commission is invited to review the activities proposed by its Scientific Advisory Committee as detailed above. The Commission may wish to highlight its priorities and to consider budgetary implications in finalising the programme of work.

## APPENDIX A

**DRAFT TERMS OF REFERENCE FOR WORKING GROUPS,  
WORKSHOPS AND OTHER ACTIVITIES**

- (I) WORKSHOP ON DATA COLLECTION METHODS APPLIED TO ALL SEGMENTS OF THE FLEET AND THEIR COHERENCE WITH THE REQUIREMENTS OF THE GFCM TASK 1**
- a) review the different methodologies and data collection programmes in place within GFCM Member countries;
  - b) review the problems arising from the submission of Task 1 data;
  - c) for each of the problems raised in the point above, exchange experience from other countries on the same field;
  - d) agree on methods to address the problems raised;
  - e) anticipate problems related to the submission of Task 1.3.
- (II) PROPOSAL OF A SHORT WORKING PROGRAMME TO IMPROVE THE KNOWLEDGE AND ASSESS THE STATE OF THE RED CORAL IN THE MEDITERRANEAN**
- a) undertake an inventory of red corals including a review of the available information of each country on biology, fishery and regulations;
  - b) gather the existing scientific literature on the distribution of the red coral, protection patterns, management plans when adopted and restocking; and
  - c) find synergies with RAC/SPA activities and other initiatives on this issue.
- (III) WORKSHOP ON ALGAL AND JELLY FISH BLOOMING**
- a) provide updated information on the cases of algal and jelly fish blooming reported in the Mediterranean and Black Sea;
  - b) review the different mitigating management measures/approaches taken in relation to algal and jelly fish bloomings;
  - c) review the effects of algal and jelly fish blooming on fisheries;
  - d) review methodologies and data collection programmes developed in relation to bloomings;
  - e) develop a scientific framework in support of management instruments towards eliminating and/or mitigating the bloomings;
  - f) review the human health-related problems caused or associated with the bloomings.

**APPENDIX B****PROPOSAL OF A MEDIUM WORKING PROGRAMME TO IMPROVE KNOWLEDGE AND ASSES THE STATUS OF ELASMOBRANCHES IN THE MEDITERRANEAN AND THE BLACK SEA****Background**

Many species of elasmobranches are living in the Mediterranean (about 47 sharks and 38 rays). They are mostly caught as bycatch of commercial fisheries targeting bony fishes; but usually all specimens are marketed. Few fisheries are targeting sharks. The landing of elasmobranches increased from 10 000 to 25 000 tonnes between 1970 and 1985, and then slowly decreased to 15 000 tons in 2002.

There is evidence that the elasmobranches of the Mediterranean are declining in abundance, diversity and range due to the intense fishing activity. Their biological characteristics (low fecundity, late maturity and slow growth rates) make also elasmobranches vulnerable to fishing pressure. Some species are already threatened. In addition, there is a lack of aggregated knowledge on the biology and fishery of elasmobranches in many parts of the Mediterranean.

Taking into account the vulnerability of elasmobranches fishes and in frame of a protection and stock management strategy of this group, many action plans were elaborated on this issue (FAO IPOA-shark, the Action Plan for the conservation of the cartilaginous fishes in the Mediterranean (UNEP-RAC/SPA, 2003), the EC Action Plan for the Conservation and Management of Sharks). The GFCM addressed the issue by organizing a transversal working group on bycatch/incidental catches (Italy, September 2008) and a transversal workshop on selectivity improvement and by-catch reduction (Tunisia, September 2009) where major concern for elasmobranches were well manifest.

These last meetings concluded that there is a lack of knowledge on the biology and fishery of elasmobranches in many parts of the Mediterranean and strongly encouraged more studies on population dynamics (population size, structure and demographics) on species of conservation concern (also in terms of fishery management) in parallel to mitigation measure in those cases where protected species are involved.

The above mentioned workshop held in Tunisia suggested to setup a medium term working program to identify and fill gaps in the current knowledge that exist in elasmobranches fisheries, in order to assess and manage the Mediterranean stocks. With a view of elaborating this regional program, it is proposed to carry the following activities:

1. Undertake an inventory of elasmobranches including a review of the available information on taxonomy and species distribution in the area as well as on the status of these species in the Mediterranean and the Black Sea. A working document updating this information will be prepared ;
2. Gather and compile data and information on fishing activities targeting elasmobranches including the potential impact on habitat Loss and Degradation as well as on bycatch of elasmobranches species, in particular those of concern. The main Indicative data shown below is needed in relation to the fisheries and the biology of species following a standard protocol:
  - Description of the fisheries
  - Catch estimates/bycatch

- Catch by unit effort
  - Fishing areas
  - Sex and sizes composition of the catches
  - Reproductive biology
  - Age and growth
  - Feeding habits
3. Update the available information on studies on mitigation measures for bycatch reduction. It is proposed to test mitigation measures and technologies that have been developed outside the Mediterranean and that are currently used and employed by the Regional Fisheries Management Organizations;
  4. Gather the available information on critical habitats (nursery grounds) and species distribution, mainly for those at high risk needing special management or protection measures.
  5. Organize an expert meeting in 2010 (3-4 days) to assess and analyze the outcome from the above mentioned activities (1 to 4) and identify appropriate methodologies and approaches to assess the stocks of selected commercial species and required action for the following years. This meeting will also consider the possibility to establish a regional network of expert dealing with this issue
  6. Organize in 2010 a training course on age reading and growth parameters of the main elasmobranches species. The available guidelines and other tools will also be used as documentation for the training.
  7. Organize a meeting in 2011 on stock assessment (5-7 days) of selected elasmobranches species with particular attention to the species listed on annex 2 and 3 of SPA/BD protocol of Barcelona convention
  8. Finalize a GFCM publication on the results obtained through this medium term

### **Scheduling**

Actions 1 to 4:	May to October 2010
Action 5:	November-December 2010
Follow up (if any) of the action 5:	May- September 2010
Action 6:	2010 (date to be defined)
Action 7:	September-October 2011
Action 8:	February 2012

**Requirements**

- a. Designation of a general coordinator<sup>1</sup> of the medium term working program with the following terms of reference:
  - Coordination of activities aiming to collect data and information as well as preparing working documents for the expert meetings including the elaboration of required terms of reference;
  - Organization of the expert meetings (agenda, identification of the key speakers, finalization of the report etc....);
  - Organization of the training course
    - elaboration of the program
    - facilitation of the training
    - elaboration of the report of the training course
- b. Designation of an expert in the field of stock assessment of sharks to prepare and moderate the relevant expert meeting

**Budget estimates**

General coordinator and consultancy:	24,000 dollars
Travels/coordinators and experts:	40,000 dollars
Training (5 days, 20 trainees):	30,000 dollars
Expert in the field of stock assessment:	12,000 dollars
Reports and publication:	14,000 dollars
Total:	<b>120,000 dollars</b>

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<sup>1</sup> Qualifications: Advanced university degree in marine sciences; extensive experience in the field of elasmobranchs biology, ecology and population dynamic and familiarity with the GFCM's structures and procedures