



**PERFORMANCE REVIEW OF THE
GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN
AND BLACK SEA**

20 January 2011

EXECUTIVE SUMMARY

The Thirty-second Session of the General Fisheries Commission for the Mediterranean (GFCM), considering the statement of the FAO Committee on Fisheries (COFI) in March 2007 on the need for all Regional Fisheries Management Organisations (RFMOs) to undertake a performance review, agreed that such a review should be undertaken in 2009. In 2009, at its next Session, the Commission endorsed guidelines and criteria for the performance review. The guidelines provided a suggested approach, which included assessment of the GFCM Agreement and the extent to which measures adopted achieve the objectives of the Commission and international instruments. The criteria, similar to those used for performance reviews by other RFMOs, included the legal framework, conservation and management, compliance and enforcement, decision-making and dispute settlement, international cooperation and financial and administrative issues. In addition, aquaculture was included in the review given its important and increasing role in the Mediterranean.

The Commission agreed that the review would take place during 2009 and 2010, with the results being presented to the Thirty-fifth Session of the Commission in 2011. An independent Performance Review Panel was appointed, consisting of experts in international legal fisheries instruments, fisheries and aquaculture management and fisheries science and management.

The Panel found that GFCM and its subsidiary bodies have worked very hard to achieve the Commission's objectives and the Secretariat had maintained high standards in serving the Commission. The Panel made a number of recommendations for further strengthening the GFCM; key findings and recommendations appear below.

1. The legal framework of the GFCM

- The Agreement is weak and outdated and there are many fundamental areas that need improvement, although *de facto* implementation of several areas where there are gaps and weaknesses is occurring. The Agreement should be reviewed and either amended or replaced to ensure an effective legal basis.
- The GFCM Rules of Procedure have many gaps and therefore need updating in many respects.

2. Conservation and management

- The future of GFCM is not in the routine production of a large number of stock assessments every year. Instead it is in targeting a few highly useful and complete fishery assessments, that could be used to improve conditions on the four components of sustainability: bio-ecological, social, economic and institutional.
- The Commission should consider requesting advice only for those fisheries resources that involve more than one of its members and where it intends to take coordinated management action.
- Most of the assessments units used by the SAC to provide management advice are based on geographical sub-areas (GSAs). It is generally not known if these assessment units actually correspond to meaningful biological units. Results from stock assessments that are not based on meaningful biological units may be misleading. The SAC should give high priority to the identification of meaningful biological units and provide advice only for those assessments units that are known to correspond to meaningful biological units.

3. Aquaculture

- GFCM should review its overall work programme on aquaculture with an aim of updating and identifying priorities and making the programme more adequate to address recent needs including human and budgetary implications.
- The CAQ should concentrate its activities on issues of strategic importance for regional aquaculture development. To this end it should consider recommending the development of an aquaculture policy, to be shared among all Members, where strategic issues are discussed and adequately addressed.
- The function and organization of the CAQ, CMWG and WGs should be reviewed with a view to clarifying their functions, organization and procedures in order to ensure the most effective outcomes.

4. Compliance and enforcement

- There are a number of areas which require review and action, including the implementation of flag State duties, compliance with the Recommendation on port State measures, uneven compliance and enforcement by Members of GFCM Recommendations and decisions in general and the failure of Members to provide required information.

- A more comprehensive system of monitoring, control and surveillance (MCS) should be considered that would implement the long-term components of the Control and Enforcement Scheme.
- Compliance and enforcement mechanisms should be considered to ensure follow-up on infringements to regional management measures, and for cases of non-compliance.

5. Decision-making and dispute settlement

- Processes and procedures are outdated and vague, greater clarity could foster better decisions and their broader implementation
- The dispute settlement provision in the GFCM Agreement should be amended to reflect the requirements of the UN Fish Stocks Agreement.

6. International cooperation

- The Agreement and Rules of Procedure should be updated to include contemporary provisions on observers, in line with international fisheries instruments.
- Cooperation with non-members could be further promoted, including with non-member Black Sea States.
- GFCM Members should implement the GFCM Recommendations that deter IUU fishing activities by the vessels of non-cooperating non-members.
- GFCM and the International Commission for the Conservation of Atlantic Tuna (ICCAT) should follow up the recommendations on cooperation between the organizations in the 2008 ICCAT Performance Review.
- The Commission should continue efforts to develop the capacity of its Members to provide the information to, and implement Recommendations of, the Commission, and strengthen them as appropriate, and continue its efforts in securing assistance to developing States.

7. Financial and administrative issues

- A full review and assessment of existing GFCM human resources and their ToRs should be considered.
- A review of the costs and benefits of holding meetings in Rome or in Member countries should be considered, including possible agreement on expenses to be borne by the host country.

- Funding mechanisms for extrabudgetary-supported activities should be explored.
- The agreed financial audit should be implemented within the next two years.

The Review Panel is confident that with a modernisation of the Agreement and relevant Rules of Procedure, as well as institutional strengthening, *inter alia* through a review of the objectives and mandates of the subsidiary bodies with a view to their a simplification and streamlining, GFCM can make further substantial progress towards meeting its objectives.

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ABBREVIATIONS AND ACRONYMS

1982 Convention	1982 United Nations Convention on the Law of the Sea
ACCOBAMS	Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area
Agreement	Agreement for the Establishment of the General Fisheries Commission for the Mediterranean
APFIC	Asia-Pacific Fishery Commission
CAF	GFCM Committee on Administration and Finance
CAQ	GFCM Committee on Aquaculture
CIHEAM	International Centre for Advanced Mediterranean Agronomic Studies
CMSC	Coordination Meeting of the Subcommittees
CMWG	Coordinating Meeting of the <i>ad hoc</i> Working Groups
CoC	GFCM Compliance Committee
Code of Conduct	FAO Code of Conduct for Responsible Fisheries
COFI	FAO Committee on Fisheries
Commission	General Fisheries Commission for the Mediterranean
Compliance Agreement	Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas
CWP	Coordinating Working Party
EAM	Environment Aspects of Aquaculture in the Mediterranean
EEZ	Exclusive Economic Zone
EIFAC	European Inland Fisheries Advisory Commission
EU	European Union
FADs	Fishing Aggregation Devices
FAO	Food and Agriculture Organization of the United Nations
FIGIS	FAO Fisheries Global Information System
FIMP	FAO Fishery Product Trade and Marketing Service
FIPS	FAO Fishery Statistics and Information Service
FIRA	FAO Fishery Aquaculture Service
GDP	Gross Domestic Product
GFCM	General Fisheries Commission for the Mediterranean
GIS	Geographical Information Systems
GSA	Geographical Sub-Area
GT	Gross Tonnage

IAMZ	Mediterranean Agronomic Institute of Zaragoza
ICCAT	International Commission for the Conservation of the Atlantic Tuna
ICES	International Council for the Exploration of the Sea
ICSEM	International Commission for the Scientific Exploration of the Mediterranean Sea
ICJ	International Court of Justice
IGO	Intergovernmental organization
InDaM	Indicators for Sustainable Development of Aquaculture and Guidelines for their use in the Mediterranean
IOTC	Indian Ocean Tuna Commission
IPA	Immediate Plan of Action
IPOA	International Plan of Action
IPOA-Capacity	International Plan of Action for the Management of Fishing Capacity
IPOA-Seabirds	International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fishing
IPOA-Sharks	International Plan of Action for the Conservation and Management of Sharks
IPOA-IUU	International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing
IUCN	International Union for Conservation of Nature
IUU fishing	Illegal, Unreported and Unregulated fishing
JWG	Joint Working Group
MAP	Mediterranean Action Plan of UNEP
MCS	Monitoring, Control and Surveillance
MEDRAP	Mediterranean Regional Aquaculture Project
MOU	Memorandum of Understanding
MPA	Marine Protected Area
NASO	National Aquaculture Sector Overview
NGO	Non-governmental organization
NEAFC	North East Atlantic Fisheries Commission
OECD	Organization for Economic Cooperation and Development
PAP/RAC	Priority Action Plan/ Regional Activity Centre
Port State Measures Agreement	2009 FAO Agreement on Port State Measures to Prevent, Deter and Eliminate IUU fishing

RAC/SPA	Regional Activity Centre for Specially Protected Areas
RECOFI	Regional Commission for Fisheries
REIO	Regional economic integration organization
Region	The Mediterranean and the Black Sea and connecting waters
RFB	Regional Fishery Body
RFMO	Regional Fisheries Management Organization
RSN	Regional Fishery Bodies Secretariats Network
SAC	Scientific Advisory Committee
SCCESS	Subcommittee on Economic and Social Sciences
SCSA	Subcommittee on Stock Assessment
SCSI	Subcommittee on Statistics and Information
SCMEE	Subcommittee on Marine Environment and Ecosystems
SELAM	Socio-Economic and Legal Aspects of Aquaculture in the Mediterranean
SHoCMed	Project on Developing site selection and carrying capacity for the Mediterranean aquaculture within aquaculture appropriate areas
SIPAM	Information System for the Promotion of Aquaculture in the Mediterranean
STCF-SGMED	European Commission Scientific, Technical and Economic Committee for Fisheries, Sub-Group of the Mediterranean
TAC	Total Allowable Catch
TECAM	Technology of Aquaculture in the Mediterranean
TORs	Terms of Reference
UN	United Nations
UNCED	1992 United Nations Conference on Environment and Development
UNDP	United Nations Development Program
UNEP	United Nations Environment Programme
UNGA	General Assembly of the United Nations
UNFSA	United Nations Fish Stocks Agreement
VMS	Vessel Monitoring System
WCAFC	Western Central Atlantic Fishery Commission
WGMA	<i>Ad Hoc</i> Working Group on Marketing
WGs	Working Groups
WGSA	<i>Ad Hoc</i> Working Group on Sustainability
WGSC	<i>Ad Hoc</i> Working Group on Siting and Carrying Capacity

1. INTRODUCTION

1.1 Background

The Thirty-second Session of the General Fisheries Commission for the Mediterranean (GFCM), considering the statement of the FAO Committee on Fisheries (COFI) in March 2007 on the need for all Regional Fisheries Management Organisations (RFMOs) to undertake a performance review, agreed that such a review should be undertaken in 2009. It was recognized that this would enable GFCM to align itself with other RFMOs, noting that, for example, this process had already been launched or completed by the North East Atlantic Fisheries Commission (NEAFC), the International Commission for the Conservation of Atlantic Tuna (ICCAT) and the Indian Ocean Tuna Commission (IOTC).

In 2009, at its next Session, the Commission endorsed the guidelines and criteria in Appendix 1 for the performance review and agreed that it would take place during 2009 and 2010, with the results being presented to the Thirty-fifth Session of the Commission in 2011.

1.2 GFCM Performance Review

1.2.1 The Panel

The Panel was selected on the basis of guidelines outlined in Appendix 1, and consisted of the following external experts:

Judith Swan	Coordinator, expert in international legal fisheries instruments
Philippe Ferlin	Expert in fisheries and aquaculture management
Jean-Jacques Maguire	Expert in fisheries science and management

1.2.2 Criteria for the performance review

The criteria shown in Appendix 1 formed the basis for the performance review. It had been agreed in principle that the Panel members would review the criteria and Terms of Reference (TORs) agreed in 2009 at the Thirty-third Session of the Commission. In its review, the Panel took into consideration the important and increasing role of aquaculture in the Commission and included the following criteria, addressed in Part 4.2 of this report:

- Status of aquaculture
- Establishment and priorities of the Committee on Aquaculture (CAQ)
- Missions and organization of the CAQ, the Coordinating Meeting of the *ad hoc* Working Groups (CMWG) and the Working Groups (WGs)

- Information and promotion
- Promotion of sustainable development and responsible management of aquaculture

1.2.3 The modus operandi of the Performance Review Panel

The Performance Review Panel met for one day at GFCM headquarters in Rome on 1 February 2010, together with members of the GFCM Secretariat. They agreed on a *modus operandi*, including the division of responsibilities, format for the report and the need to communicate further using electronic or teleconferencing means available given the absence of a budget for subsequent meetings in person.

The GFCM Secretariat circulated a letter to Members on 10 February 2010, announcing the Panel and inviting Members to provide their views to the experts, but no response was received. The Coordinator attended the Thirty-fourth Session of GFCM where she received informal comments from a number of participants. A Panel expert also participated in the third CMWG organised by the CAQ in February 2010. In addition, the Secretariat has been very helpful in providing information, and the FAO Fisheries and Aquaculture Policy and Economics Division has kindly provided the research assistance of FAO interns Marika Ceo, Sarah Fagnani and Erik van Doorn.

The steps for the preparation and revision of the draft report, suggested by the Secretariat, were agreed. As a first step, the experts were to submit their contributions to the Coordinator, who would prepare the first composite draft of the report and circulate it to the experts for their review and comments. The second draft would then be circulated to the GFCM Secretariat for their input on factual aspects and the third draft would be presented by the Coordinator to relevant FAO staff members for their comments. A fourth draft would be circulated to GFCM Members for their review and comments on factual aspects of the report. The final report would be presented to the Thirty-fifth Session of GFCM.

The final draft was circulated to GFCM Heads of Delegation for comment on technical aspects of the report on 21 October 2010, and subsequently to relevant FAO staff members. Comments were received from the European Union (EU), Italy, France and Turkey. They were considered by the Review Panel and integrated into the text of the Performance Review as appropriate, except that some of the comments addressed non-technical aspects, or were either already addressed in the Review or beyond the scope of the Review. The Panel was deeply appreciative of the time taken to submit the comments and further noted that the Review provides a basis for discussion during the Thirty-fifth Session of GFCM of all issues raised in the comments.

1.2.4 The structure of the Report

The report follows the structure of the criteria agreed by the Commission and shown in Appendix 1, with Panel recommendations added after each relevant Part and shown together in a Compendium at the end of the report.

2. GFCM BACKGROUND

2.1 Introduction to GFCM

2.1.1 Area of Competence

The Area of Competence of the GFCM is comprised of the Mediterranean and the Black Sea and connecting waters. Thirty Geographical Sub-Areas (GSAs) have been designated by Resolution GFCM/31/2007/2 for analysing fisheries data in the Mediterranean,¹ and the Area of Competence, including the GSAs, is shown in Figure 1. Most countries that exercise jurisdiction over waters within the GFCM Area of Competence in the Mediterranean have not declared Exclusive Economic Zones (EEZs) and a large portion of the Mediterranean is considered high seas. This is not applicable to the Black Sea, as coastal States have all declared EEZs and there are no high seas.

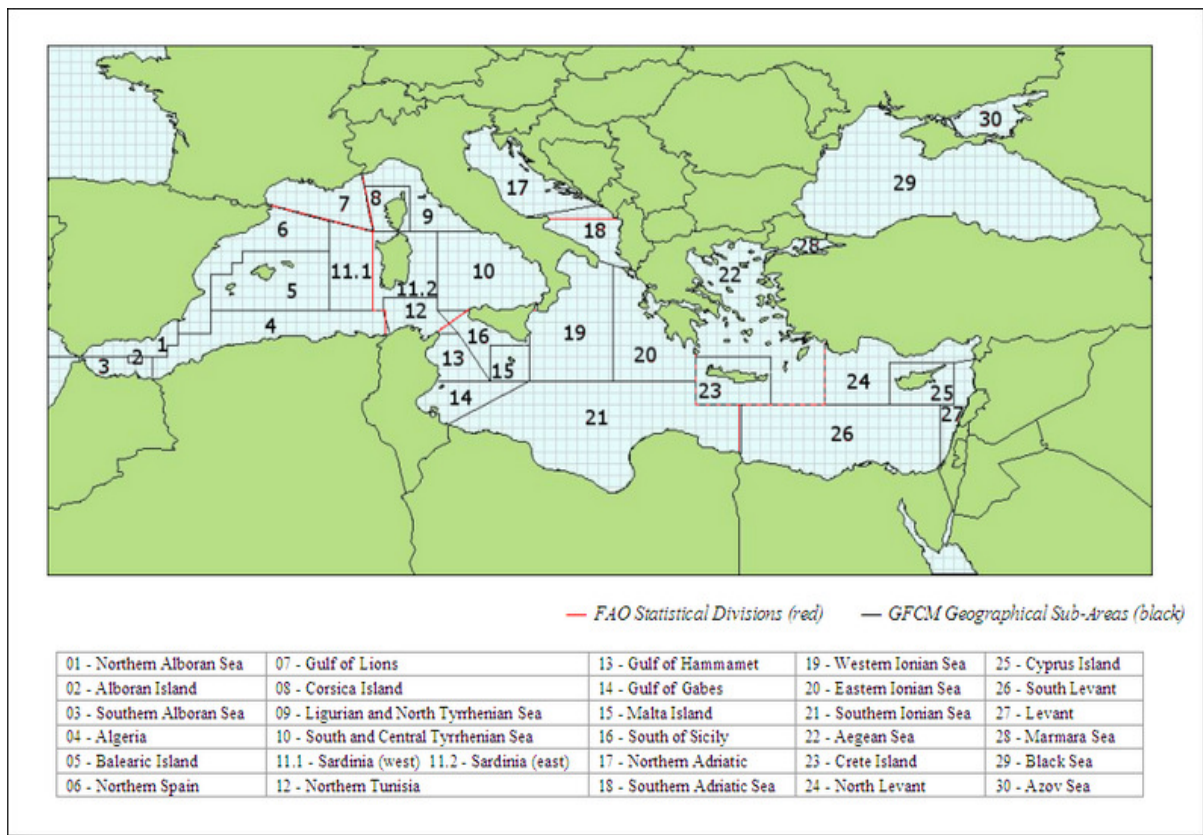
2.1.2 Objective and responsibilities

The objective of the Commission is to promote the development, conservation, rational management and best utilization of living marine resources, as well as the sustainable development of aquaculture in the Region, and to this end it has the following functions and responsibilities, as provided in Article III (1) (a) – (h) of the GFCM Agreement:

- a) to keep under review the state of these resources, including their abundance and the level of their exploitation, as well as the state of the fisheries based thereon;
- b) to formulate and recommend, in accordance with the provisions of Article V, appropriate measures:
 - (i) for the conservation and rational management of living marine resources, including measures:
 - regulating fishing methods and fishing gear,
 - prescribing the minimum size for individuals of specified species,
 - (ii) - establishing open and closed fishing seasons and areas,

¹ [http://www.gfcm.org/gfcm/topic/16162/en](http://www.gfcml.org/gfcm/topic/16162/en)

Figure 1
GFCM Area of Competence and geographical sub-areas



- regulating the amount of total catch and fishing effort and their allocation among Members,

for the implementation of these recommendations;

- c) to keep under review the economic and social aspects of the fishing industry and recommend any measures aimed at its development;
- d) to encourage, recommend, coordinate and, as appropriate, undertake training and extension activities in all aspects of fisheries;
- e) to encourage, recommend, coordinate and, as appropriate, undertake research and development activities, including cooperative projects in the areas of fisheries and the protection of living marine resources;
- f) to assemble, publish or disseminate information regarding exploitable living marine resources and fisheries based on these resources;

- g) to promote programmes for marine and brackish water aquaculture and coastal fisheries enhancement;
- h) to carry out such other activities as may be necessary for the Commission to achieve its purpose as defined above.

In formulating and recommending measures under paragraph 1(b), the Commission must “apply the precautionary approach to conservation and management decisions, and take into account also the best scientific evidence available and the need to promote the development and proper utilization of the marine living resources”.

2.1.3 Structure of the Commission

Membership in GFCM is open to both Mediterranean and Black Sea coastal states and regional economic organizations as well as to United Nations (UN) Member States whose vessels engage in fishing in Mediterranean waters. There were 24 Members at July 2010, as shown in Figure 2. Non-members may accede to the Commission by depositing an Instrument of Acceptance with the FAO Director-General. Membership becomes effective on the date on which the Commission approves the application for membership by a two-thirds majority.

The organizational structure of the Commission is shown in Figure 3. There are four Committees, four Sub-Committees and thirteen WGs.

The Agreement provides in Article II(11) that the seat of the Commission is to be at FAO headquarters or such other location as may be determined by the Commission. It was agreed by GFCM in 2005 that the Government of Italy would host the headquarters at Palazzo Blumensthal in Rome. The move was still pending at the time of writing.

Figure 2
Members of GFCM²

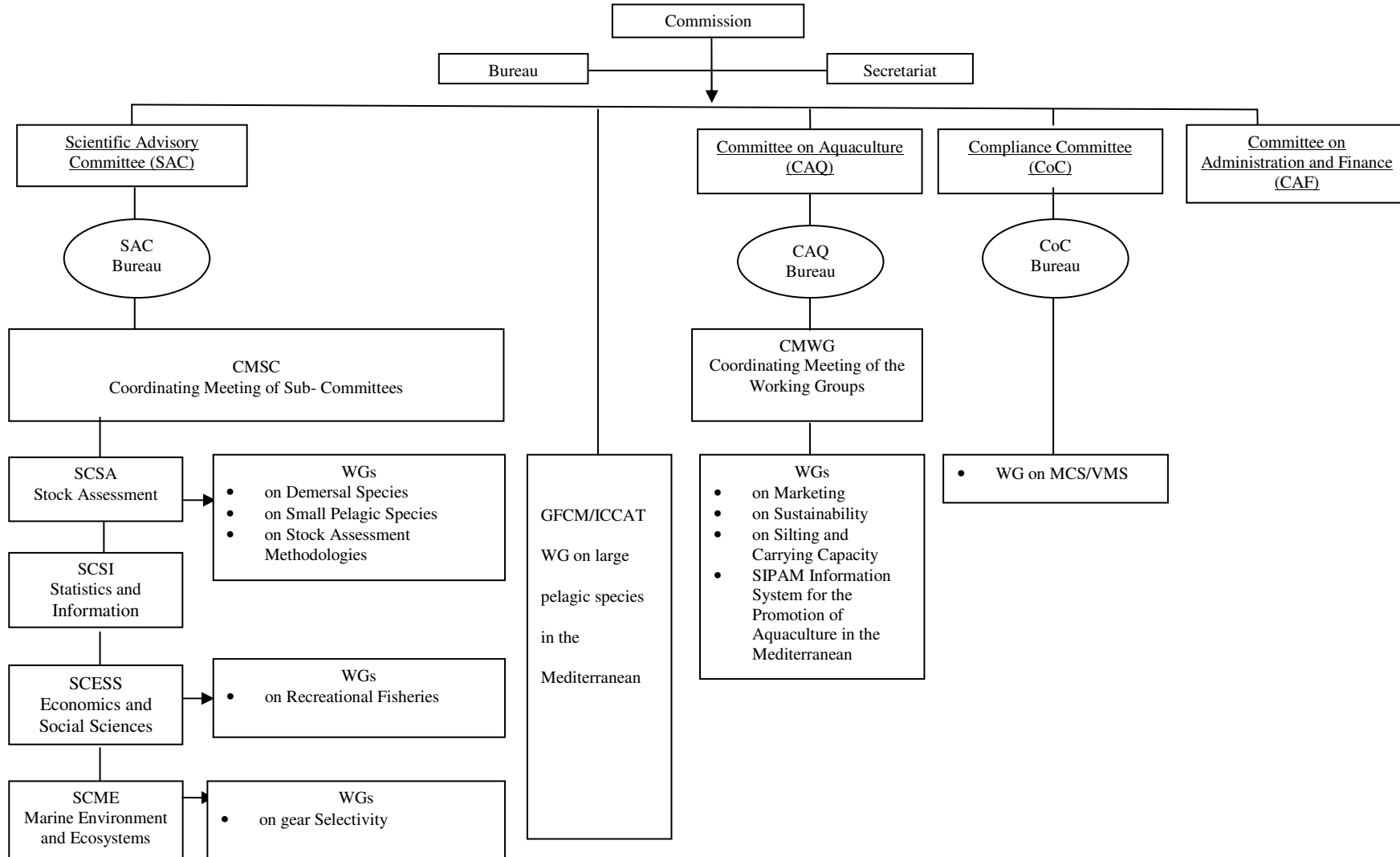
MEMBER	DATE OF ACCEPTANCE	DATE OF RATIFICATION
Albania	10 April 1991	10 October 2003
Algeria	11 December 1967	26 April 2005
Bulgaria	3 July 1972	29 November 2006
Croatia	22 May 1995	28 November 2003
Cyprus	10 June 1965	3 August 2000
Egypt	19 February 1951	
European Union	25 June 1998	27 July 2000
France	8 July 1952	30 October 2002
Greece	7 April 1952	29 August 2002
Israel	20 February 1952	
Italy	29 May 1950	23 August 2000
Japan	12 June 1997	30 July 2004
Lebanon	14 November 1960	4 March 2005
Libyan Arab Jamahiriya	13 May 1963	23 December 2003
Malta	29 April 1965	23 December 1999
Monaco	14 May 1954	12 June 2001
Montenegro		31 January 2008
Morocco	17 September 1956	24 July 2006
Romania	19 February 1971	1 October 2003
Slovenia	25 May 2000	29 April 2004
Spain	19 October 1953	15 February 2002
Syrian Arab Republic	12 December 1975	12 July 2009*
Tunisia	22 June 1954	30 June 2003
Turkey	6 April 1954	5 June 2000

* Accordg to a Letter received from the Syrian Embassy (the formal ratification not yet received by FAO)

² The Republic of Serbia became a member on 27 April 1992 and its withdrawal became effective on 17 July 2007. The United Kingdom became a member on 20 November 1950 and its withdrawal became effective three months after 25 March 1968.

Figure 3

Organigram of the General Fisheries Commission for the Mediterranean



2.1.3.1 *Scientific Advisory Committee (SAC)*

The SAC was established by GFCM in 1997 at its Twenty-second Session.³ The Commission agreed that the SAC should be composed of specialists and be in a position to provide independent scientific advice, free of any political consideration. It was emphasized that the SAC should give advice on the questions that might be put to it by the Commission. The Commission further agreed that the SAC should, as far as possible, reach its conclusions by consensus and should establish subsidiary bodies “taking into account the special needs of Mediterranean fisheries”.

The mandate of the SAC⁴ is to provide independent advice on the technical and scientific bases for decisions concerning fisheries conservation and management, including biological, social and economic aspects, in particular:

- assess information provided by Members and relevant fisheries organizations or programmes on catches, fishing efforts, and other data relevant to the conservation and management of fisheries;
- formulate advice to the Commission on the conservation and management of fisheries;
- identify cooperative research programmes and coordinate their implementation;
- undertake such other functions or responsibilities as may be conferred by the Commission.⁵

The first SAC reference framework was agreed at GFCM XXVII in 2002 for 2003-2004 and subsequently updated as necessary, including in 2010. Each year the Commission formally approves the SAC work programme for the following intersessional period.

The SAC has a bureau composed of a chairperson and two vice-chairpersons to handle issues that have to be dealt with intersessionally. The SAC itself meets once a year, sufficiently in advance of the Commission to allow time to prepare, distribute and consider its reports and advice. Subcommittees also meet once a year, generally approximately four to six weeks before the meeting of the SAC.

Subcommittee meetings are held concurrently in the same location to facilitate exchanges of views on transversal issues. WGs are created as needed, including transversal WGs to deal with issues concerning

³ Report of the Twenty-second Session of the General Fisheries Commission for the Mediterranean. Rome, Italy, 13-16 October 1997, paragraph 28.

⁴ <http://www.gfcm.org/gfcm/about/6.2/en>.

⁵ From <http://www.gfcm.org/gfcm/about/6.2/en>.

more than one subcommittee. The mode of operation of the subcommittees and the WGs has been regularly adjusted to improve efficiency.

The structure of the SAC is shown in Figure 3. It operates with a Bureau and five subsidiary bodies, as discussed below.

The **Coordination Meeting of the Subcommittees (CMSC)**, agreed at the Seventh Session of the SAC in 2004, was conceived “as a functional steering group to harmonize multidisciplinary inputs and outputs from the subcommittees and coordinate transversal issues and the preparation of integrated advice on fisheries management which would be presented to the Committee for consideration. The SAC emphasized the need to keep the CMSC flexible and responsive, thereby meeting as often as necessary, but reporting formally to the SAC with the appropriate format.” This proposed mandate of CMSC was endorsed in 2005 by the Twenty-ninth Session of GFCM, which also approved the following TORs:

- propose and/or update elements of the Reference Framework for the mandate of the SAC for the intersessional period and plan the distribution of activities among Sub-Committees;
- promote the organization of and the participation in interdisciplinary or cross-sectional WGs answering directly to the SAC;
- examine the reports of the interdisciplinary or cross-sectional WGs and Sub-Committees and prepare proposals for an integrated Programme of Work of the SAC;
- collate draft recommendations of subsidiary bodies and formulate, as appropriate, multidisciplinary advice on fisheries management for examination by the SAC;
- function as editing committee for the selection of scientific and technical documents to be published in the GFCM *Studies and Reviews* series;
- conduct any other task specifically requested by the Commission or the SAC or approved by consensus by the members of the CMSC.

The Subcommittee on Stock Assessment (SCSA),⁶ established in 1999, has three WGs. One is on stock assessment methodologies and the other two aimed to review works related to stock assessment of small pelagic and demersal species performed at sub-regional level (before the WG meetings) and to carry out assessments at the meetings through practical sessions. In 2008, the SAC agreed that assessments undertaken including by the FAO regional projects and/or other international initiatives, such as the

⁶ For the mandate of the SCSA and all other Subcommittees of the SAC, see <http://www.gfcm.org/gfcm/topic/16092/en>.

Scientific, Technical and Economic Committee for Fisheries, Sub-groups of the Mediterranean (STCF-SGMED), would be presented directly to the SCSA for review. This proved too demanding for the time available to the SCSA meetings, so in 2010 the SAC agreed that the SCSA would not review assessments but would instead focus on the consistency of advice and validation of management advice. The mandate of the SCSA, as agreed at the Second Session of the SAC in 1999, is to:

- organize the scientific activities to carry out assessments of particular stocks and in particular of shared stocks;
- review and analyse the assessments done during the intersession, including the joint GFCM/ICCAT WG on large pelagic species;
- provide annotated summaries of the assessments to the SAC;
- review and analyze the assessment methods and propose the most appropriate ones.

The Subcommittee on Marine Environment and Ecosystems (SCMEE), established in 1999 has WGs on selectivity and on by-catch. Its objectives, agreed at the Second Session of the SAC in 1999, are to:

- establish links with existing regional bodies concerned with studies on the relationship/interaction between environment and marine ecosystems;
- provide analysis of ecosystems trends and environmental conditions in relation to trends in fishery resources, biodiversity and genetic resources;
- evaluate the impacts of human action on the marine ecosystem, including fisheries and propose measures that aim to limit the negative effect of these actions;
- assess the relevance of international agreements on conservation and environment protection on Mediterranean fishery resources management;
- propose to the SAC research programmes related to the impacts of fisheries on the marine environment and marine ecosystems.

The Subcommittee on Economic and Social Sciences (SCESS), established in 1999 has a WG on recreational fisheries and one on socio-economic indicators. Its mandate, agreed at the Second Session of the SAC, is to:

- review and analyze socio-economic studies available in view of identifying options and evaluating measures related to fishing management;

- promote bio-economic research and identify the appropriate methods for the harmonization and implementation of the fishery management measures;
- strengthen and network social sciences expertise in the region;
- analyze data of economical and social nature and evaluate related indicators.

The Subcommittee on Statistics and Information (SCSI), established in 1999, has no WGs. Its functions, agreed at the Second Session of the SAC, are to:

- provide support to the other sub-committees of the SAC in the field of statistical methodology, data bases conceptualisation, design, harmonization and analysis;
- review the updating and maintenance of regional databases concerning GFCM as a whole;
- review the updating and maintenance of other data bases including geographical information systems (GIS) relevant to the SAC;
- ensure the compatibility and exchange with other national and international organizations and institutions concerned with fisheries statistics data and information as well as with FAO/FIGIS (Fisheries GIS);
- identify the type and level of details and desegregation required for the work of the other Sub-Committees. The identification of sources of errors involved in the data collection and processing should also be identified.

Except for the assessment WGs of the SCSA, the other WGs generally have a transversal nature, that is, they cover issues related to more than one of the subcommittees.

FAO Regional Projects and the European Commission WG dedicated to the Mediterranean fisheries (STECF-SGMED) make it possible to assess a high number of stocks and fisheries in selected sub-regions and to prepare data sets according to the needs of the GFCM-SAC WGs on stock assessment.

Subcommittees and WGs are led by coordinators, not chairs. This illustrates the importance given to coordination in the work of the SAC's subsidiary bodies.

At its seventh meeting in 2004, the SAC confirmed that the WGs should be widely open to ensure the greatest participation, while the subcommittees could enjoy a more limited participation, especially if a regular attendance of concerned institutes and scientists was ensured. The Committee particularly emphasized the need to foster a task-oriented advisory process driven by GFCM objectives and to renew

efforts to formulate, whenever possible, multidisciplinary management advice, encompassing multispecies fisheries and in conformity with an ecosystem approach.

The SAC and all of its subsidiary bodies make every effort to coordinate and collaborate with other organisations in their field of expertise. This has been particularly important in the case of the SCMEE whose work is regularly enhanced by joint activities with the United Nations Environment Programme Regional Activity Centre for Specially Protected Areas (UNEP RAC/SPA), the International Union for Conservation of Nature (IUCN), the World Wide Fund for Nature (WWF), the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS) and the Pelagos Sanctuary.

2.1.3.2 Committee on Aquaculture (CAQ)

The CAQ⁷ was established in 1995 by the Twenty-first Session of GFCM. It replaced the GFCM WG on Artificial Reefs and Mariculture, and held its First Session in 1996. It meets biennially.

The mandate of the CAQ is to monitor trends and promote the sustainable development and responsible management of marine and brackish water aquaculture in the region, and provide independent advice on the technical, socio-economic, legal and environmental bases for common standards, norms and guidelines and decisions for consideration by the Commission, in particular to:

- assess information provided by Members and relevant aquaculture related stakeholders or programmes on production statistics, market data, culture systems, technologies used, farmed species, and maintain related databases, including relevant socio-economic, environmental, biotic and abiotic indicators;
- promote the formulation of common standards and guidelines on sustainable development and responsible management of aquaculture;
- identify cooperative research and training programmes and coordinate their implementation;
- carry out other duties, functions or responsibilities related to aquaculture promotion as be conferred by the Commission.

At the time of the establishment of the CAQ, the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM) had been addressing issues relating to aquaculture and playing a

⁷ <http://www.gfcm.org/gfcm/about/6.3/en> .

coordinating role among relevant networks. CIHEAM was established in 1962 under the auspices of the Council of Europe and the Organization for Economic Cooperation and Development (OECD) and is today an intergovernmental organization (IGO) of thirteen Mediterranean countries. It has three central missions (education, research and cooperation) and is recognised as an authority in its fields of activity: Mediterranean agriculture, food and sustainable rural development. FAO participates in the Centre's Governing Board as observer.

The progress of the work of relevant aquaculture networks and the importance of aquaculture development was addressed in 1998 at the Twenty-third Session of GFCM and interest was expressed in fostering cooperation on aquaculture. Due to the transitional situation of the autonomous budget of GFCM, priority was given to holding the statutory meetings of the CAQ and to activities for which funding had been assured by voluntary contributions from the GFCM Members. At an extraordinary Session on the financing of GFCM activities in 1999, prior to the Twenty-fourth Session of GFCM, some delegations questioned the low level of funding allocated to some WGs of the CAQ, the feasibility for some countries to participate effectively in the work of those Groups, and the physical arrangements for providing interpretation for consecutive Sessions of the Sub-Committees. In addition, comments were made on the insufficient funding envisaged for activities of the networks under the CAQ. The ensuing GFCM Session included as priorities for future meetings the Second Session of the CAQ as well as annual aquaculture network activities and further agreed that, in order to reduce the cost of the meetings envisaged for the next intersessional period, the Session of the CAQ would be held in two languages only.

After the GFCM autonomous budget entered into force in 2004, the Fifth Session of the CAQ in 2006 noted that the evolving situation in aquaculture called for a programme approach for the work of its subsidiary bodies. The CAQ agreed that, for the time being, it would be more appropriate to merge the Environment Aspects of Aquaculture in the Mediterranean network (EAM) and Technology of Aquaculture in the Mediterranean (TECAM) and Socio-Economic and Legal Aspects of Aquaculture in the Mediterranean (SELAM) into a single subsidiary body supported by a number of *ad hoc* WGs, as required.

In addition, to maintain consistency in the *modus operandi* of GFCM subsidiary bodies, the Committee decided to take into consideration the experience gathered by the SAC and agreed to establish, as a subsidiary body of the CAQ, a CMWG. The establishment of the CMWG, to be supported by three *ad hoc*

WGs, was endorsed in 2007 at the Thirty-first Session of GFCM, and the agreed mandate or main issues to be considered by each, are shown below.⁸

Coordination Meeting of *Ad Hoc* Working Groups (CMWG) The main objective of the CMWG was to re-organise, prioritise, streamline and re-schedule the various project proposals and activities identified through the WGs, with an appropriate budget proposal. Its mandate is to:

- propose and/or update elements of the work plan for the activities of the CAQ during the intersessional period and organize accordingly the distribution of activities among *ad hoc* WGs;
- promote the participation of suitable expertise in the activities of *ad hoc* WGs;
- identify data and information needs that can be handled by the Information System for the Promotion of Aquaculture in the Mediterranean (SIPAM);
- appraise the reports of the *ad hoc* WGs, ensure consistency of draft recommendations of these subsidiary bodies and formulate, as appropriate, integrated advice on responsible aquaculture for examination by the CAQ;
- do functions as editing committee for the selection of scientific and technical documents to be published in the GFCM Studies and Reviews series;
- conduct any other task specifically requested by the Commission or the CAQ or approved by consensus by the members of CMSC.

***Ad Hoc* Working Group on Marketing (WGMA)** The main issues were identified as:

- fish transportation, commercialization and producers–distributors relation;
- image of the aquaculture sector and its products;
- market synergies with fish from the capture sector.

⁸ The mandate for the CMWG is in FAO/General Fisheries Commission for the Mediterranean. Report of the Thirty-first Session. Rome, 9–12 January 2007. *GFCM Report*. No. 31. Rome, FAO. 2007. 80p., Appendix E. <ftp://ftp.fao.org/docrep/fao/meeting/014/aj322e.pdf> .

Ad Hoc Working Group on Sustainability (WGSA) The main issues were identified as:

- ecosystem (holistic) approach;
- definition and usage of appropriate indicators and monitoring measures;
- interaction between aquaculture and the environment and other coastal activities (e.g. fisheries, industry, tourism, transport, nature protection);
- aquatic animal health and welfare through best available practices;
- bio-security concepts.

Ad Hoc Working Group on Siting and Carrying Capacity (WGSC) The main issues were identified as:

- integration of aquaculture with other coastal management issues;
- carrying capacity assessment;
- interaction with current national legal frameworks;
- propose for harmonizing regional guidelines for aquaculture site allocations and management.

SIPAM

The official information system of the GFCM, SIPAM, is relevant to the work of the GFCM and the CAQ. SIPAM was first conceived in the early 1990s and has changed its methodology over the years. The objectives of SIPAM are to:

- improve the availability and circulation of high-quality aquaculture information and data at regional level in the Mediterranean;
- facilitate sustainable aquaculture policies planning, implementation and monitoring;
- increase mutual knowledge among aquaculture stakeholders in the different countries;
- promote initiatives for cooperation.

2.1.3.3 Compliance Committee (CoC)

In 2007, during the First Session of the CoC, its TORs were agreed and were reconfirmed in subsequent

Sessions. They are:

- a) review compliance with conservation and management measures adopted by the Commission and make such recommendations to the Commission as may be necessary to ensure their effectiveness;
- b) review the implementation of measures of monitoring, control, surveillance, and enforcement adopted by the Commission as may be necessary to ensure their effectiveness;
- c) define, develop and make recommendations to the Commission concerning the phased development and implementation of the GFCM Control and Inspection Scheme;
- d) monitor, review and analyze information pertaining to the activities of Non-Contracting Parties and their vessels which undermine the objectives of the Agreement including, in particular, Illegal, Unreported and Unregulated (IUU) fishing, and recommend actions to be taken by the Commission to discourage such activities;
- e) perform such other tasks as directed by the Commission.

The CoC has no WGs, and has addressed the information needed to monitor compliance with the conservation and management measures of the Commission.

2.1.3.4 Committee on Administration and Finance (CAF)

The establishment of the CAF was first requested in 2008, during the Thirty-second Session of GFCM, with its functions focusing on reviewing administrative matters, compliance with the rules of procedure and financial rules and the implementation of the adopted budget.

In 2009, during the Thirty-third Session of GFCM, the relevance of CAF was highlighted and the Commission unanimously decided to establish this Committee and agreed on its TORs. Its functions are to:

- review administrative matters relating to the Executive Secretary and his staff and make appropriate recommendations to the Commission;
- review compliance with the rules of procedures and financial rules;

- review the implementation of the budget adopted at the previous Session of the Commission and analyse and make recommendations on the draft budget to be adopted at the current Session of the Commission;
- perform such other administration and financial matters as may be referred to it by the Commission.

2.1.4 Cooperation with FAO regional projects

Five FAO regional projects were operating in cooperation with GFCM as at November, 2010, and their progress has been reviewed in each Session of the SAC prior to consideration in the GFCM Session. This is consistent with the Commission's functions in Article III(1)(e) of the GFCM Agreement, which gives the Commission responsibilities to "encourage, recommend, coordinate and, as appropriate, undertake research and development activities, including cooperative projects in the areas of fisheries and the protection of living marine resources". The projects are described below, and further details may be found in the 2010 SAC information document "Major activities of the FAO regional projects" (GFCM:SAC12/2010.Inf.15).

Adriamed "Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea" has been operative since 1999 and the participating countries are the Republics of Albania, Croatia, Italy, Slovenia and Montenegro. This project has been co-financed by Italy and the EU and the budget since 1999 has totalled nearly US\$7 000 000. Its objectives are to develop common basic knowledge and support regional fishery management through improved scientific coordination among the fishery institutions. Its main recent activities relate to demersal and small pelagic fishery resources, social and economic fishery sciences, aquaculture, Adriatic fishery statistics and information systems and strengthening regional cooperation.

ArtFiMed "Sustainable Development of Artisanal Mediterranean Fisheries in Morocco and Tunisia" is administered under the COPEMED II project, and participating countries are Morocco and Tunisia. This project is financed by the Spanish Government through the Spanish Agency for International Cooperation and Development. Its objective is to contribute to poverty reduction of the target artisanal fisheries communities by improving their livelihood in respect of the ecosystems which they exploit and contribute to the positive integration of these communities in fisheries management and coastal area development. Its main recent activities relate to improving the socio-economic situation and sustainable livelihood of the target communities in Morocco and Tunisia, promoting and extending the results of the project to other artisanal areas and reinforcing the information base on Mediterranean artisanal fisheries.

Copemed II “Coordination to Support Fisheries Management in the Western and Central Mediterranean” is phase two of Copemed and has been operative since 2008 (phase one was operational between 1996 and 2005). Participating countries are Algeria, France, Italy, Libya, Malta, Morocco, Spain and Tunisia. Phase one of the Project was financed by the Agencia Española de Cooperación Internacional. The second phase is co-financed by the Secretaría del Mar de España and the EU and the budget since inception has totalled US\$1 3 million. The objective is to maintain the sustainability of the marine resources in the Western and Central Mediterranean sub-regions and their ecosystem, taking into account environmental, biological, economical, social and institutional issues, and promoting scientific cooperation among the regions. Its main recent activities relate to strengthening national capacity in fisheries statistics, strengthening fisheries research, strengthening institutional capacity at national sub-regional levels and strengthening regional cooperation.⁹

EastMed “Scientific and Institutional Cooperation to Support Responsible Fisheries in the Eastern Mediterranean” was established in 2009 for five years, and participating countries are the Eastern Mediterranean countries. The project is co-financed by Greece, Italy and the EU and the budget is US\$381 497. The objective is to support and improve the capacity of national fishery agencies to increase their scientific and technical information base for fisheries management and to develop coordinated and participative fisheries management plans in the Eastern Mediterranean sub-region.

Medfisis “Mediterranean Fishery Statistics and Information System” has been operative since 2004 when the first Coordination Meeting of the project was held. Participating countries are Cyprus, Egypt, Lebanon, Syria and Turkey. The project is jointly financed by the EU and FAO, and the budget is US\$340 282. The objective is to promote and develop a Mediterranean Fishery Statistics and Information System with the ultimate objective of achieving a region-wide integrated system as outlined by the MedStat adaptive approach.

Medsudmed "Assessment and Monitoring of the Fishery Resources and the Ecosystems in the Straits of Sicily" has been operative since 2001 and participating countries are Italy, Libyan Arab Jamahiriya, Malta and Tunisia. The project is financed by the Italian Ministero delle politiche agricole alimentari e forestali, and the budget since its inception has totalled US\$4 467 006. The objectives are to strengthen the national and regional research capacities and to promote scientific cooperation in the southern part of the central Mediterranean for the assessment and monitoring of fishery resources and to improve the knowledge on fishery resources and their ecosystems – as a contribution to the development of responsible fisheries

⁹ <http://www.faocopemed.org/html/project.html>.

management – by supporting research activities related to the interactions between demersal and small pelagic fishery resources and biotic and abiotic environmental factors. Its main recent activities relate to demersal and small pelagic fisheries resources, the MedSudMed portal and fishery and ecosystem information system, training and regional cooperation.

2.1.5 Cooperation with ICCAT

GFCM (through FAO) and ICCAT have developed, but not signed, a Memorandum of Understanding (MoU). It was broad in scope and it was considered that it would need to be reviewed in future.¹⁰ At the Thirty-first Session of GFCM in 2007, several delegates favoured the use of instruments such as memoranda of understanding to be endorsed by the Commission itself, but it was agreed to postpone such consideration.

GFCM endorses recommendations adopted by ICCAT. From 1999, there have been nineteen such recommendations and among them, seven related to Bluefin tuna. More recently, an exchange of information concerning IUU fishing vessels has been proposed between the two organizations.

Cooperation between GFCM and ICCAT was earlier forged through two GFCM/ICCAT Expert Consultations on the Evaluation of Stocks of Large Pelagic Fisheries in the Mediterranean Sea, held in 1990 and 1992. In 1993, GFCM endorsed the recommendation of the second consultation and established a GFCM/ICCAT Ad Hoc Joint Working Group on Large Pelagic Species in the Mediterranean Sea (JWG).

The JWG first met in 1990 and annually up to 1998 after which meetings became more sporadic: 2000, 2002, 2004 and 2008. The focus of activities of the JWG has been to compile and analyze statistics on catches of tuna-like species in the Mediterranean Sea and to improve the knowledge base for stock-assessments. It mainly served as a mechanism to facilitate exchange of data and other information on these species, to check and improve the consistency of available information and to avoid duplication of activities between the two RFMOs.

At its Eighteenth Session in 2004, ICCAT had acknowledged the need to strengthen cooperation with GFCM through the JWG, but without determining how this might be done.

¹⁰ The document was referenced, *inter alia*, in 2006 in an Assessment of the achievement of the joint GFCM/ICCAT ad hoc working group on large pelagic species in the Mediterranean, GFCM:XXXI/2007/Inf.13 para 10.

In 2007, an assessment of the achievements of the JWG¹¹ recognized that, due to the recent evolution of the tuna fisheries and their exploitation in the Mediterranean and taking into consideration the regular development of working procedure in each of the two organizations, there might be a need to reconsider and update the objectives of the JWG and to re-examine its functioning to better satisfy common concerns.

A significant deterioration of the status of some tuna species had been reported, necessitating more accurate information to monitor other large pelagic fisheries, including recreational and sport fisheries. Also, in recent years, a deterioration of the quality of data on catches, biological aspects and on fishing effort for some important fisheries clearly advocated for further strengthening and developing scientific and technical activities through the Joint GFCM/ICCAT WG on Large Pelagic Species.

A number of suggestions were made, including for a revised mandate and specific TORs for the JWG and strengthened cooperation in terms of data, prioritization and other areas. In fact, the Commission had in 2005 endorsed in principle the draft mandate for the JWG subject to ICCAT approval.

The Commission at the Thirty-first Session of GFCM in 2007 reiterated its interest for strengthened cooperation with ICCAT on large pelagic fisheries and agreed that in the short-term, priority should be given to the betterment of knowledge on the sustainable exploitation of small tuna fisheries, including their biological and socio-economic aspects. It was underlined that efforts should be made to ensure complementary work by the two Organizations. The Observer from ICCAT expressed his availability to pursue and strengthen collaboration between the scientific committees of the two organizations on the basis of specific TORs for the mandate of the JWG. However, the proposed TORs do not appear to have been formally adopted; reports of each organization indicated that they were awaiting approval by the other.

The following year, in 2008, the SAC at its Eleventh Session reviewed the outcomes of the JWG which had shifted the focus of its work to small tuna fisheries in the Mediterranean and the Black Sea. It endorsed the suggestion to add four small tuna species as well as skipjack tuna in the list of GFCM priority species. The SAC invited all countries catching tuna and tuna-like species to be involved in future activities of the JWG so as to cover all multidisciplinary aspects and all Geographical Sub-Areas (GSAs) in order to ensure scientific results on the status, trends and indicators on small tunas, possibly with support by FAO projects. The JWG also considered small pelagic species in 2009.

¹¹ <http://www.faocopemed.org/html/project.html>.

Bluefin tuna farming has also been the subject of GFCM/ICCAT cooperation on large pelagic species. In 2002, GFCM decided that, in view of the expansion of bluefin tuna farming in the Mediterranean, practical guidelines were required to ensure the sustainability of this activity. It therefore invited ICCAT to establish a Joint Ad Hoc GFCM/ICCAT WG on Sustainable Bluefin Tuna Farming/Fattening in the Mediterranean. The WG was given specific TORs, a delimited time span and *modus operandi*. The WG held three sessions between 2003 and 2005 and formulated the requested guidelines. It was subsequently disbanded.

An analysis and recommendations relating to the relationship between GFCM and ICCAT is in Part 4.5.4.

2.2 Distinctive features of GFCM

2.2.1 Relationship to FAO

The Agreement establishing GFCM as an Article XIV body is under the framework of FAO and the Commission retains very close links with the Organization, even in situations where it may enjoy considerable autonomy. The Agreement has a hybrid nature, being a treaty under international law in which the Parties play a major role and on the other hand, being within the framework of FAO and operating through FAO. Amendment of the Agreement would require approval, *inter alia*, by the FAO Governing bodies and may be disallowed if it is inconsistent with the objectives, purposes or Constitution of FAO.

Membership is open only to Members of FAO or of the UN, its Specialized Agencies or the International Atomic Energy Agency. The bodies may adopt and amend their own Financial Regulations provided that these are consistent with the principles embodied in the Financial Regulations of FAO. The FAO Finance Committee had to approve, and may disallow amendments to, GFCM Financial Regulations if they are inconsistent with the principles of the Financial Regulations of FAO. Contributions, either to the budget or for any other activities, are to be paid into a trust fund managed by the Organization in accordance with the FAO financial procedures.

As an Article XIV body established under the FAO Constitution, the GFCM does not have an autonomous legal personality, i.e. capacity to hold rights and obligations in its own right and, therefore, has to act through FAO. The secretary and the staff are officials of FAO appointed by the Director-General and subject to the Staff Regulations and Rules of the Organization. The Executive Secretary is therefore responsible to the Director-General of FAO.

The GFCM must also transmit reports of its Sessions to the Director-General, as well as of its committees and working parties established under Article VII of the Agreement.

As an Article XIV body, GFCM benefits from a comprehensive set of facilities, privileges and immunities, and is bound by inherent obligations that are attached to the status of FAO, as provided in a number of multilateral and bilateral instruments, in particular the Convention on the Privileges and Immunities of the Specialized Agencies of 21 November 1947.

2.2.2 Fisheries

The Mediterranean, defined as FAO Statistical Area 37, includes the Black Sea and the Azov Sea.¹² It is a comparatively small semi-enclosed sea accounting for approximately 0.8% of the total marine surface area of the world. It has a negative water budget because the loss of water through evaporation is greater than the inputs due to rain and river runoffs; this results in the inflow of Atlantic water through the Strait of Gibraltar in the Western Mediterranean. The Atlantic waters become progressively more saline sinking to greater depth while moving eastward. In the eastern Mediterranean, the Levant basin has warm-temperate hypersaline waters, the Black Sea has hyposaline waters and the Azov Sea shows cold-temperate estuarine conditions. The Mediterranean has a large number of habitats with many small local stocks and species.

Marine fishery production is generally greater on continental shelves. The Mediterranean does not have large continental shelves: it is mostly a narrow coastal fringe with the exceptions of the Adriatic Sea, Gulf of Gabès, northern Black Sea, south of Sicily and the Gulf of Lions. The fisheries of the Mediterranean have shown a surprising resilience to fishing compared with some areas of the Atlantic in spite of the absence of formal and coordinated management measures as shown, for example, in Figure 7.

A few species of small pelagics account for approximately 50 percent of total Mediterranean catches (sardine, anchovy, sprat). Mixed bottom fisheries using small mesh trawls, gillnets, trammel nets, traps, pots and dredges capture a large suite of demersal fish and invertebrates of high value for the fresh fish market, with no single species making up more than 10 percent of the total demersals. The more than 100 species considered demersals, including molluscs and crustaceans, account for about 40 percent of total reported catches in the Mediterranean and Black Sea. The prominent large pelagics are bluefin tuna and swordfish accounting for about 3 percent of total catches, but their economic value is far greater.¹³

¹² Summarised from <http://www.fao.org/docrep/009/y5852e/Y5852E04.htm#ch2.5>

¹³ Review of the state of world marine fishery resources. *FAO Fisheries Technical Paper*. No. 457. Rome, FAO. 2005. 235p. <http://www.fao.org/docrep/009/y5852e/Y5852E04.htm#ch2.5>.

The small pelagic and demersal fisheries in the GFCM area, accounting for close to 90% of landings, are generally conducted by small fishing units relatively close to their home ports. This complicates the interpretation of fishery data to a great extent. GSAs have been defined but these do not necessarily correspond to distinct meaningful biological units, and in fact few distinct biological units (stocks) have been identified.

There does not appear to be a full appreciation that the way in which neighbouring countries manage their fisheries in areas under their national jurisdiction might have an influence on their own.

That is in stark contrast to the North Sea area where scientists and fishery managers from coastal countries recognised in the late 19th and early 20th century that they were exploiting common biological resources. They identified stock units and the links between them, realizing at the same time the need for coordinated management and research action. This led to the creation of the International Council for the Exploration (ICES) in 1902. ICES provides advice for the management of fisheries in the Northeast Atlantic and in the Baltic Sea.

The International Commission for the Scientific Exploration of the Mediterranean Sea (ICSEM) rebranded The Mediterranean Science Commission,¹⁴ has been mostly concerned with scientific study and not with the provision of scientific advice for fisheries management. Closer links with the ICSEM might become beneficial, however, if an ecosystem approach to fisheries is implemented.

To address this situation, distinct meaningful biological units should be identified for the main resources in the Mediterranean and the links between them, as recommended in Part 4.1.

2.2.3 Aquaculture

A 2008 report submitted to the CAQ¹⁵ underlines the major role played by aquaculture in enhancing global fish production and in responding to the rising demand for fishery products. In the Mediterranean and Black Sea, meanwhile the production of capture fisheries has stabilized in the early 90's and many capture fisheries stocks tend to be fully or overexploited, marine aquaculture production continued to grow thus representing an increasing share of the global Mediterranean fisheries production.

The same exponential trend of the overall world aquaculture production is closely reflected in the Mediterranean and Black Sea. Indeed, the average annual growth for the period from 1985-2006 for

¹⁴ <http://www.ciesm.org/index.htm>.

¹⁵ Trends and issues of marine and brackish Mediterranean aquaculture, GFCM:CAQ/VI/2008/2.

marine and brackishwater aquaculture is estimated at 7.6%. This compares to capture fishery production which was about -0.7 %, during the same period, thereby confirming its stagnating situation.

In the GFCM area, molluscs culture and farming of finfish species, including bluefin tuna farming operations for fattening have characterized mariculture in recent years. Total marine and brackishwater aquaculture production, including all categories and species, has increased from 89 959 tonnes in 1985 to 234 446 tonnes in 1995 and thereafter to 377 984 tonnes in 2006. Production of brackishwater and marine finfish showed the fastest growth rate, which corresponded to an average annual growth rate of 24.9 % for the period 1985-1995 and 14.6% for the period 1996 - 2006.

The production of molluscs had the maximum increase during the decade 1985-1995 with an average annual growth rate of 8.5%. Comparatively, the average annual growth rate for the period 1996-2006 was only 1.3%. The production of crustaceans and aquatic plants remained limited in quantity terms.

Within the mollusc production, the mussels *Mytilus galloprovincialis* (European mussels) remain the main species representing in 2006, 60.4% of the total with 112 486 tonnes. The Japanese carpet shell (*Ruditapes philippinarum*) represented in turn 30.5% with a production of 56 731 tonnes, while the European oyster (*Ostrea edulis*) ensured 5.23 % of the mollusc production.

The production of the two species sea bass (*Dicentrarchus labrax*) and gilthead sea bream (*Sparus aurata*) is accountable for 92.4 % (respectively the 46.2% and the 46.0%) of finfish production: in 2006. Bluefin tuna, *Thunnus thynnus* was estimated at 9.1% of the production¹⁶. The rest was covered mainly by the meagre (*Argirosoma regius*), flathed grey mullet (*Mugil cephalus*) and other sparids.

The Mediterranean and Black Sea production appeared quite homogeneous in terms of species reared and global trends. Important variations should however be noted at country level, although Egypt, France, Spain, Italy, Turkey and Greece remained the main producing countries.

Production trends in values closely followed those described above for quantities. In 2001-2002, however, the rapid production growth lead to some unbalance between the supply and demand with the consequence of forcing prices to drop down, especially for Sea bass and Sea bream, which encountered reduced profitability and sometime economic losses for concerned farms. A similar pattern seems to take place

¹⁶ However these figures are related to the fattening of young tunas caught by fisheries, and not to a complete aquaculture production (from the hatchery to the market size).

presently if the data forecasts for 2009 are confirmed, with possible negative impacts on the overall chain, e.g., feed producers, hatcheries and transports. This type of problem, representing an imbalance between the supply and demand, resulting in a decline in the selling price during this period, is a general trend for all aquaculture products, including trout during the 1980s, salmon during the 1990s, turbot and flounder and cod during the 2000s.

Over the years, many significant changes occurred within the sector to explain the sustained growth in production and value. The evolution showed a better organization of the sector through activities of the producers and producers associations, especially in the northern portion of the Mediterranean. Notably progress was made to better transfer the results of applied research to producers and rearing technologies, at least for some specific species. In particular, improvement in fry production for Sea bass and Sea bream, as well as the expansion of cage culture and the refined fish feed technology, including with better fish health management control and husbandry practices characterized enhanced outputs. New markets for sea bass and sea bream have been opened as a result of a doubling of the size of these species.

New market opportunities together with significant investments from both public and private sources facilitated the expansion of the sector. The increasing of international trading and large market distribution networks have also contributed to creating a new and evolving context for farmed finfish.

However, near shore, traditional extensive aquaculture systems remained unchanged. This is the case for example for production from lagoons and estuarine areas. While contributing steadily to the overall production increases, the traditional extensive and/or small-scale family aquaculture systems appear overall less robust, compared to a decade ago.

In this rapidly evolving situation, global trends, although satisfactory, may hide emerging difficulties and will need to be confirmed from data and information for each main category of farms and production systems together with a close monitoring of market trends.

3. THE GFCM AGREEMENT – A LEGAL ANALYSIS

3.1 Introduction

The Panel was requested to provide a legal analysis of the extent to which the GFCM Agreement implements international fisheries instruments and of the institutional implications as a FAO Article XIV body, including the following considerations:

- Are the objectives and functions clearly stated, and are they consistent with international fisheries instruments?
- Does the text of the Agreement impose any restraints on the organization that prevent it from implementing relevant international instruments?
- Recommendations on how the GFCM Agreement could be improved.

3.1.1 GFCM Agreement

The GFCM Agreement was concluded in 1949, with the establishment of the General Fisheries Council for the Mediterranean, and since then the following amendments have been adopted:

- 1963: Adoption of a revised text of the GFCM Agreement to implement FAO Conference Resolutions No. 43/57 and 46/57 relating to principles for the granting of observer status and governing conventions and agreements concluded under Article XIV of the FAO Conference.
- 1976: The Council, in accordance with the provisions of the newly created Article V relating to Recommendations on management measures, would have had the function, *inter alia*, to adopt Recommendations in relation to its responsibilities with regard to the conservation and the management of resources, as listed in Article III (b) (i); and the implementation of conservation and management measures, as specified in Article III (b) (ii).
- 1997: The main amendments changed GFCM from a Council to a Commission, provided for membership of regional economic integrations organizations and new obligations for the Contracting Parties including their contributions to an autonomous budget for the functioning of the Commission.

The Agreement has a standard framework and provisions used by other FAO Article XIV regional fishery bodies (RFBs) and complies with the FAO Constitution. The framework includes the preamble, the Commission, organization, functions, region, recommendations on management measures, reports, Committees, working parties and specialists, cooperation with international organizations, finances, expenses, administration and standard legal “housekeeping” items governing amendments, acceptance, entry into force, territorial application, withdrawal, interpretation and settlement of disputes and termination.

Similarly, the purpose and functions of GFCM described in Article III (noted in Part 2.1.2 above) are standard and almost identical to those of two of the other three FAO Article XIV RFBs, the Asia-Pacific Fishery Commission (APFIC) and the Regional Commission for Fisheries (RECOFI) in the Near East. However, many of the functions in the Agreement of IOTC, another FAO Article XIV body with a management mandate, build upon concepts that appear in more recent international fisheries instruments concluded after the 1992 United Nations Conference on Environment and Development (UNCED). These concepts include training, enhancement, special interests and needs of developing country Members and promotion of optimum utilization.

Overall, the Agreement reflects the era in which it was originally drafted, more than half a century ago. There have since been massive changes in fisheries management, including in the role of fisheries governance through RFMOs. These changes, formalized in international fisheries instruments, are outlined in Part 3.1.2, and their implications for the GFCM Agreement are detailed in the analysis of the Agreement that appears in Part 3.2. The GFCM Rules of Procedure are also shown to be in need of review and updating as described in Part 3.3.

3.1.2 International Fisheries Instruments

The GFCM Agreement and amendments predate the major international fisheries instruments concluded since the 1982 United Nations Convention on the Law of the Sea (the 1982 Convention), except for the 1997 amendments which strengthened the Commission to some extent by upgrading its status from a Council and enabling binding conservation and management measures to be taken through an agreed decision-making process.

The international fisheries instruments span almost thirty years and include legally binding treaties and agreements as well as “soft” law, or voluntary instruments. Almost all GFCM Members have become party to one or more of the binding instruments as shown in Figure 4. As at November, 2010:

- 20 Members have ratified the 1982 Convention;
- 7 Members have accepted the 1993 FAO Compliance Agreement (Compliance Agreement);¹⁷
- 12 Members have ratified the 1995 UN Fish Stocks Agreement; (UNFSA);¹⁸ and
- The EU, France and Turkey have signed the 2009 FAO Agreement on Port State Measures.¹⁹

¹⁷ Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas.

¹⁸ Agreement for the Implementation of the Provisions of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, adopted in 1995.

These and other principal international fisheries instruments are described below.

1982 United Nations Convention on the Law of the Sea

The 1982 Convention provides a framework for the rights and duties of coastal States and flag States applicable to fisheries in areas within and beyond national jurisdiction. It refers to use of the best scientific evidence for the conservation of fisheries and to the objective of optimum utilization.

1993 FAO Compliance Agreement

The Compliance Agreement applies to high seas fishing and focuses on duties of flag States to exercise effective jurisdiction and control over its fishing vessels, as well as the consequences of reflagging that undermine fisheries conservation and management. Many of its provisions have been reinforced and strengthened by the UNFSA.

1995 United Nations Fish Stocks Agreement

The UNFSA was developed to elaborate provisions relating to high seas fishing for straddling fish stocks and highly migratory fish stocks in the 1982 Convention, and is therefore directly relevant to the conservation and management of fisheries in the GFCM Region. Its objective is to ensure the long-term conservation and sustainable use of straddling fish stocks and highly migratory fish stocks through effective implementation of the relevant provisions of the 1982 Convention, and it contains a list of twelve general principles for the conservation and management of fisheries on straddling and highly migratory fish stocks such including reference to biodiversity, ecosystems, bycatch and discards and MCS. Among other things, it also elaborates flag State duties, port State measures, transparency in RFMOs and recognition of the special requirements of developing States.

1995 FAO Code of Conduct for Responsible Fisheries (Code of Conduct)

The Code of Conduct is global in scope and is a voluntary instrument that elaborates on responsible fisheries and aquaculture and forms the basis for a wide range of actions and measures of RFMOs. It is clearly interlinked with and complementary to other fisheries instruments, both voluntary and binding. The Code makes numerous references to the role of RFMOs in establishing a responsible international fisheries regime. Some relevant provisions are:

¹⁹ FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing.

- the Code of Conduct is global in scope, and directed towards stakeholders that include RFMOs;
- RFMOs are charged with collaborating in the implementation of the objectives and principles in the Code;
- RFMOs should apply a precautionary approach to the conservation, management and exploitation of living aquatic resources;
- the role of RFMOs in attaining fisheries management objectives, providing a management framework and procedures, data gathering and management advice, application of the precautionary approach, describing management measures and implementation of the Code itself.

Figure 4

GFCM Members' acceptance of international fisheries instruments

The abbreviation (fc) indicates a formal confirmation; (a) an accession; (s) a succession; (ds) a definitive signature; (p) the consent to be bound; (sp) a simplified procedure.

GFCM Members	1982 Convention		UN Fish Stocks Agreement		FAO Compliance Agreement	FAO Agreement on Port State Measures
	<u>Signature</u>	<u>Ratification/ Accession</u>	<u>Signature</u>	<u>Ratification/ Accession</u>	<u>Acceptance</u>	<u>Signature</u>
Albania		23/06/03(a)			8/11/05	
Algeria	10/12/82	11/06/96				
Bulgaria	10/12/82	15/05/96		13/12/06(a)		
Croatia		05/04/95(s)				
Cyprus	10/12/82	12/12/88		25/09/02(a)	19/07/00	
Egypt	10/12/82	26/08/83	05/12/95		14/08/01	
European Union	07/12/84 □	01/04/98(fc)	27/06/96 □	19/12/03	6/08/96	22/11/09
France	10/12/82 □	11/04/96	04/12/96 □	19/12/03		19/11/10
Greece	10/12/82	21/07/95	27/06/96	19/12/03		
Israel			04/12/95			
Italy	07/12/84 □	13/01/95	27/06/96	19/12/03		
Japan	07/02/83	20/06/96	19/11/96	07/08/06	20/06/00	
Lebanon	07/12/84	05/01/95				
Libyan Arab Jamahiriya	03/12/84 □					
Malta	10/12/82 □	20/05/93		11/11/01(a)		
Monaco	10/12/82 □	20/03/96		09/06/99(a)		
Montenegro		23/10/06(d)				
Morocco	10/12/82 □	31/05/07	04/12/95		30/01/01	
Romania	10/12/82 □ □	17/12/96		16/07/07(a)		
Slovenia		16/06/95(s)		15/06/06(a)		
Spain	04/12/84 □	15/01/97	03/12/96	19/12/03		
Syrian Arab Republic					13/11/02	
Tunisia	10/12/82 □	24/04/85				
Turkey						9/11/10

1999/2001 International Plans of Action (IPOAs) elaborated under the Code of Conduct

There are four voluntary IPOAs elaborated under the Code of Conduct, which are listed below. The first three were endorsed by the FAO COFI in 1999 and the last was endorsed in 2001:

- Reducing Incidental Catch of Seabirds in Longline Fishing (IPOA-Seabirds)
- Conservation and Management of Sharks (IPOA-Sharks)
- Management of Fishing Capacity (IPOA-Capacity)
- Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU)

Of all the IPOAs, the IPOA-IUU has the deepest focus on the role of RFMOs and encourages States and RFMOs to fulfil the obligations or provisions of the other international fisheries instruments.

2009 FAO Agreement on Port State Measures

The binding Port State Measures Agreement aims to prevent, deter and eliminate IUU fishing through, *inter alia*, establishing minimum standards and requirements for vessels to provide information prior to entry into port, denial of entry into port or use of port by the port State, inspections, reports of inspections, information sharing and training.

The Agreement integrates RFMOs in its provisions, including in the cooperation and exchange of information, denying the use of a port to a vessel on an RFMO IUU Vessel List and requiring the flag State to confirm that the catch was taken in accordance with measures of an RFMO. It encourages parties to agree on minimum levels of inspection through RFMOs. There are also requirements to notify RFMOs of certain things, including the results of an inspection. The role of the flag State is included, as well as the special requirements of developing States. It will become binding after 25 instruments of ratification, acceptance, approval or accession have been deposited; as a first step, 22 countries and the EU had signed the Agreement as at November, 2010.

United Nations General Assembly (UNGA) Resolutions on Sustainable Fisheries

The annual UNGA Resolutions on Sustainable Fisheries constitute “soft law”; they address fisheries issues and call upon RFMOs to consider specific actions or measures to achieve sustainable fisheries within their areas of competence.

3.2 Panel analysis of the GFCM Agreement

The GFCM Agreement is a very basic legal tool that does not reflect fisheries management principles or governance-related provisions found in post-UNCED international fisheries instruments or the

constitutive instruments of many other RFMOs. This includes reference to the fisheries instruments themselves and to principles such as long-term sustainability, the ecosystem approach to fisheries, protection of biodiversity in the marine environment and minimization of harmful impacts on living marine resources. Basic governance provisions such as obligations of Members (including flag State duties and port State measures), observers, information, and special requirements of developing States do not appear.

Although GFCM *de facto* addresses most of these issues, as shown *inter alia* in Parts 4.2.4, 4.3.1, 4.3.2 and 4.5.5, it is considered necessary for effective regional fisheries management to have a common agreement and understanding on the principles to be used in fisheries management. Governance provisions, including those described above, occur throughout the post-UNCED international fisheries instruments as basic duties and obligations for parties to the instruments and, as appropriate, members of RFMOs. They strengthen fisheries governance of RFMOs by requiring their Members to comply with certain standards of conduct.

Many international agreements establishing RFMOs have been updated to implement international fisheries instruments and incorporate modern fisheries management principles and tools. Within the FAO family of fishery bodies alone, two bodies, the Western Central Atlantic Fishery Commission (WCAFC) and the European Inland Fisheries Advisory Commission (EIFAC), agreed in 2005 and 2010 respectively to update and strengthen the text of their Statutes. In addition, the IOTC, considering the recommendations of its Performance Review Panel, adopted a Resolution in 2009 calling for all deficiencies in the IOTC Agreement inhibiting the Commission's ability to perform its mandate consistent with internationally-agreed principles of fisheries conservation and management to be addressed, in accordance with international law. In addition, it resolved to explore all avenues recommended by the Performance Review Panel in considering options to address all deficiencies in the current Agreement.

The provisions of the GFCM Agreement are essentially standard FAO "template" provisions that were largely crafted over half a century ago. They provide a broad basis for the work currently being carried out by GFCM but, as described below, are often undefined, outmoded, conflicting, confusing, inappropriate or technically unsound. The weaknesses and gaps in the Agreement are elaborated below.

Preamble

The Preamble refers to the 1982 Convention and notes the objectives and purposes stated in Chapter 17 of Agenda 21, the Code of Conduct and "other international instruments (that) have been negotiated concerning the conservation and management of certain fish stocks". Apart from the fact

that it is of no legal consequence if an instrument has been negotiated but is not in force, a reference to post-UNCED international fisheries instruments and principles to guide the implementation of the Agreement is missing.

The Preamble refers to the Mediterranean and Black Sea and connecting waters as “the Region”, and Article IV empowers the Commission to carry out its functions “in the Region” as referred to in the Preamble”. In fact the preamble has no legal effect, but is an introduction to a formal document that serves to explain its purpose. To ensure proper legal status and implementation, the “Region” should be clearly defined in an Article of the Agreement. A mere “as referred to in the Preamble” indicates reference only and not definition.

Use of Terms

There is no Article that defines the terms used in the Agreement, such as fishing vessels or living marine resources. In addition, there is inconsistent use of the term “living marine resources” which also appears as “marine living resources”. Language is used that does not have a commonly understood meaning, such as “proper” utilization rather than the “optimum” utilization referenced in the 1982 Convention but now considered outmoded following the developments of the 2002 World Summit on Sustainable Development.

The absence of clear definition, conflicting use of terms and use of outmoded terms are considered a significant hindrance to effective implementation of the Agreement and could lead to inconsistency in the measures or approaches, as well as compliance. A common understanding of basic terms and use of commonly understood modern terms would provide a foundation for clear and common implementation and strengthen the effective functioning of the Commission.

Membership in the Commission

Membership of the Commission is set out in Article I of the Agreement and is governed by the FAO Basic Texts. This effectively rules out membership or cooperation by States and fishing entities that do not meet the criteria, contrary to the open membership advocated in Articles 8-17 of the UNFSA.

Organization

The title of Article II is “Organization”, but other RFMO instruments refer instead to “Sessions”. In fact, this Article relates to participation and procedures in sessions and meetings.

The provisions follow a standard FAO framework but the drafting is sometimes unclear and ambiguous. For example there is no notion of an official appointment or designation of a delegate or alternate in the current paragraph 1:

“Each Member shall be represented at sessions of the Commission by one delegate who may be accompanied by an alternate. Participation in meetings ... by alternates ...shall not entail the right to vote, except in the case of an alternate who is acting in the place of a delegate during his absence”.

Preferred language would be as follows:

Each Member shall designate one representative and one alternate to represent that Member in the sessions of the Commission. Alternates ...may take part in the proceedings of the Commission but shall not have the right to vote except in the case of an alternate who is duly authorized to act in the place of the representative during his or her absence.

This Article includes a standard provision on regional economic integration organizations (REIOs) that may need a review to ensure it conforms with current rules and practice of the REIO.

There is a standard FAO requirement in Article II(10) that the “time and date of all sessions shall be determined by the Commission in consultation with the Director-General of the Organization”. This may need to be reviewed to ensure that it conforms with current practice and the requirements of other FAO Article XIV bodies.

Functions

The title to Article III is not wholly descriptive of the language in the Article. In fact, it describes the “purpose” of the Commission, as well as the “functions and responsibilities”. It is standard to set out the objective of an organization, as well as its functions and responsibilities and include these in the title. In any event, all of these are very basic.

As noted above, there are no references to modern principles of fisheries management in the functions of the Commission described in Article III. In fact, the purpose of the Commission as currently defined is laced with outmoded concepts. It is to “promote the development, conservation, rational management and best utilization of living marine resources, as well as the sustainable development of aquaculture in the Region”. Given the state of the living marine resource, it may be time to refocus the general purpose along the lines of “long-term sustainable use” and “conservation” rather than “development” and “best utilization”.

A major source of confusion is the language required to indicate the binding nature of a Recommendation.

Article III (1)(b) provides that GFCM has the function/responsibility to “formulate appropriate measures for the conservation and rational management of living marine resources...and for the implementation of these recommendations”. This must be done in accordance with Article V, which sets out the decision making procedures.

According to official GFCM interpretation of these provisions, if a measure is to be binding it is called a “Recommendation” and must refer to Article V in the text. However, instruments have been adopted called “Resolution” which also refer to Article V and have had to be reclassified as “Recommendations”. Alternatively where “Recommendations” are adopted without reference to Article V they must be recategorized as “Resolutions”. This needs more clarity and simplification. In addition, the designation would benefit from a change to “conservation and management measure”, the internationally recognized term.

Another problem is the narrow focus of the indicative list of measures that may be taken “for the conservation and rational management of living marine resources”. It refers to fishing methods, minimum size, open and closed seasons and regulating total catch and fishing effort and their allocation among Members. There is no reference, for example, to gear, closed areas or compliance requirements, and needs modernization to reflect current and future needs and practices of GFCM.

The current basic functions would benefit from modernization and enhancement, a few examples are shown below.

- Promote and advise its Members and FAO on the sustainable utilization, management, protection and restoration of fisheries and aquaculture resources in the Region based on the best available scientific advice and the application of an ecosystem approach, the precautionary approach and the need to safeguard biodiversity.
- Identify and address strategic issues for fisheries and aquaculture in the Region and provide advice and recommendations on policies, measures and related actions needed to address the issues as requested by Members and FAO.
- Promote, coordinate and, as appropriate, undertake the collection, exchange and dissemination of scientific, biological, socio-economic, legal and environmental data and information, including information on common challenges and solutions to fisheries and aquaculture in the Region, as well as their analysis or study.
- Enhance communication and consultation with civil society organizations concerned with fisheries and aquaculture in the Region.

Region

As noted above, the Agreement incorrectly defines the “Region” in the preamble and Article IV loosely refers to the “Region” as the place where the Commission carries out its functions and responsibilities. There is no reference to “Area of Competence”, which is a legal term of art clearly designating the only area over which the organization may exercise its mandate. This is a major omission.

Decision-making

Article V, “Recommendations on Management Measures”, sets out the decision-making process for binding Recommendations. Essentially, a Member has 120 days to object to such measures. Other Members have sixty days to respond to that objection. Furthermore, Members are not required to give effect to the measure if more than one-third of the Members have objected to that measure. This is a relatively cumbersome procedure and requires 180 days for the measure to enter into force if two-thirds of the Members have not objected.

Waiting periods required by several RFMOs, taking into account the relevant objection procedure, vary between 60 and 120 days; only a few require six months. This ensures swift action where needed and also allows time for implementation at national level.

In addition to the excessive time taken by the objection procedure, it is weak and out-dated. In other RFMOs, it is necessary to give specific reasons for the objection, for example when it is discriminatory. The GFCM procedure permits Members to opt out with no justification or consequences. This has the potential of frustrating efforts to adopt conservation and management measures as well as their implementation. It should be a priority for the decision-making provisions to be amended in line with other RFMO instruments to ensure a restricted time period and specific grounds for objection.

Committees, Working Parties and Specialists

Article VII provides for the establishment of temporary, special or standing committees, working parties and specialists. This Article is inadequate because it does not refer to “WGs” established by the Commission, nor does it have a general provision on subsidiary bodies, including their duties and obligations to the Commission. However, in the Amended Rules of Procedure of the Organization, the title of Rule X is “Committees, working groups and other subsidiary bodies”; this appears to technically exceed the institutional authority set out in the Agreement.

Cooperation with international organizations

Although the Agreement requires the Commission to “cooperate closely with other international organizations in matters of mutual interest” it does not refer to modern forms of cooperation, including with other IGOs and institutions. It does not empower the Commission to enter into agreements with such organizations and institutions and promote complementarity or avoid duplication and conflict.

In fact, as noted in Part 2.1.5, this issue was addressed in 2007 at the Thirty-first Session, where several delegates favoured the use of instruments such as memoranda of understanding, which might have policy or financial implications, to be endorsed by the Commission itself, but it was agreed to postpone such consideration. Formal MoUs exist with ICCAT, IUCN, CIHEAM/IAMZ (Mediterranean Agronomic Institute of Zaragoza) and the UNEP/RAC-SPA. The three MoUs between the GFCM and IUCN, CIHEAM/IAMZ and the UNEP/RAC-SPA, were adopted at the Thirty-second Session of GFCM in 2008. Because of the institutional, regional and intergovernmental nature of some partners, the relevant MOUs technically exceed the authority to conclude agreements only with “international organizations”.

Financial arrangements

Article IX, “Finances”, represents the most recent amendment to the Agreement. It is standard for FAO Agreements, and appears to be adequate. Control by FAO of the budget and charges by FAO to the operating costs have been noted in Part 2.2.1 (relations with FAO) and as an Article XIV body, GFCM must abide by such control. Article X “Expenses” follow FAO standards, as do the provisions relating to expenses under Article XI “Administration”.

Final provisions

The “housekeeping” provisions relating to amendments, acceptance, entry into force etc. from Article XII to Article XIX are all in accordance with FAO standards, except for Article XVII on “Interpretation and Settlement of Disputes” which is addressed below under “Additional gaps in the GFCM Agreement”.

Additional gaps in the GFCM Agreement

In addition to the gaps in the GFCM Agreement identified in the above analysis, a number of other areas are not addressed, contrary to requirements of international fisheries instruments. Following are the key gaps that should be addressed.

- **Members’ Obligations** The Agreement does not impose standing obligations on its Members, which is a clear weakness. For example, there are no flag State duties, or port State duties or obligations to provide information as may be agreed. Such obligations are

commonly required of RFMOs in the international fisheries instruments and are standard in the constitutive instrument of other RFMOs.

- **Transparency/Observers** There is no provision relating to transparency and openness, as provided in the international fisheries instruments and the Agreements of FAO and non-FAO bodies. Such a provision would, *inter alia*, address the participation of observers, such as FAO/UN Members and Associated Members, IGOs and civil society organizations. Participation by observers is addressed in Rule XII of the Amended Rules of Procedure, but this does not refer to civil society organizations (only to FAO Members or Associate Members or international organizations) entrench their status or right to participate in meetings of the Commission to the extent that would otherwise be effected under the Agreement. It is noted that, in fact, civil society organizations are present at GFCM meetings and Sessions but there are no applicable rules governing or guaranteeing their participation.
- **Non-members** There are no provisions relating to the cooperation of non-Members, which are obliged under UNFSA to cooperate with RFMOs in the conservation and management of fisheries.
- **Dispute Settlement Procedures** The dispute settlement procedure in Article XVII falls far short of requirements in the UNFSA, which obligates RFMOs to either introduce compulsory and binding dispute settlement procedures or to agree to apply, as between the Contracting Parties, the dispute settlement procedures in Part VIII of UNFSA. This area would require significant amendment to provide for a clear system of dispute settlement in accordance with UNFSA.
- **Special needs of developing States** The needs of developing States are recognized in all modern fisheries instruments, including by other RFMOs in their constitutive instruments and by UNFSA which addresses the requirements of developing States as well as forms of cooperation with them. States are to cooperate, *inter alia*, through RFMOs towards this end.

Summary

The GFCM Agreement is significantly weak and outdated, and does not incorporate a wide range of obligations or principles contained in international fisheries instruments. It incorporates FAO standards for Article XIV bodies but falls far short of the standards in constitutive instruments of other RFMOs, particularly those established in the past fifteen years.

The failure of the Agreement to refer to modern fisheries objectives and principles has not prevented the Commission from incorporating such principles in its work programme. In fact, GFCM reported to

the 2010 Resumed Review Conference of UNFSA through the Secretary-General's Report on a range of its activities in support of implementation of the UNFSA.²⁰

However, the language of the Agreement is imprecise and confusing, it does not contain any clear up-to-date definitions, objectives or functions, there is little or no legal basis for a range of vitally important areas such as aspects of the institutional structure of GFCM and there is a substantial suite of gaps including Members' obligations, transparency and the special needs of developing States. It is clear that the time has come to review and reform the Agreement to avoid the consequences of its weaknesses, to strengthen and modernize the Commission's foundation and promote optimum and effective functioning of the Commission in future.

3.3 Implementation of rules and procedures

The Amended Rules of Procedure of GFCM, adopted in 2008, are very basic and generally reflect FAO practice. Among other things, key Rules specify the duties of the Executive Secretary (Rule V) and functions of the Chairperson and Vice-Chairpersons (Rule VIII), the Committees, WGs and other subsidiary bodies (Rule X), Budget and finance (Rule XI) and participation by observers (Rule XII)". However, they do not include a standard FAO Rule for Article XIV bodies on Applicability which provides: "With regard to matters not specially covered by these rules or in the event of any apparent conflict, the relevant provisions of the FAO shall apply".

The Rules of Procedure are implemented in a satisfactory manner by the Commission. However, similar to the Agreement, there are some areas in the Rules themselves that are confusing, inconsistent or deficient, others where updates are needed and still others where the Commission operates completely without Rules, as shown below.

Rule IX Voting arrangements and procedures

This Rule, unlike "best practice" procedures in other RFMOs and international organizations, does not encourage or otherwise refer to consensus decision-making. It requires voting in plenary meetings to be by show of hands or roll call. The roll call is to be done in French alphabetical order.

Transparent voting procedures should be guaranteed. To this extent, secret ballots are restricted to votes on matters relating to individuals, except the election of the Bureau of the Commission and its committees. However, there is nothing in the Rules which guarantee that the decision-making process must otherwise be transparent. They do not encourage free and open discussion and decision, or

²⁰ <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N09/671/80/PDF/N0967180.pdf?OpenElement>.

prohibit a matter from being discussed and decided in a closed plenary session for heads of delegation only.

In fact, there are no Rules of Procedure stating the reasons or subject areas for which sessions may be closed to delegations (except the head of delegation) or closed to observers. This became an issue at the Thirty-fourth Session in 2010, when discussions and decisions on the budget were addressed only by heads of delegation in a closed session.

Rule X Committees, working groups and other subsidiary bodies

- The language used in this Rule is not consistent with the language used in the Agreement, which refers to “committees, working parties and specialists”.
- The mandate for WGs established by the CAQ, the SAC and the CoC vary enormously. The CAQ may establish WGs on a range of topics, including the CMWG, for a range of purposes (Rule X.1.c); the SAC is restricted to establishing WGs to analyze data and advise on the state of shared and straddling resources and does not refer to the CMWG (Rule X.2.b); and the CoC is broadly empowered to establish WGs “as may be decided...”.
- The CoC is required to meet “during the annual Commission Session”; this implies that it is integrated into the Commission Session. It is not clear that it is a separate Committee meeting at a time adjoining the annual Commission Session. In fact, CAF is required to meet “before the annual Commission session”.

Rule XII Participation by observers

This Rule only refers to States and international organizations and not to civil society when in fact IGOs, such as RFMOs and non-governmental organizations (NGOs) are present at GFCM Sessions and meetings. This must be corrected. In addition, and in accordance with the practice of other RFMOs it would be useful to require observers to indicate their wish to be present a certain amount of time before the relevant Session or meeting and to indicate that they are entitled to receive documentation.

Rule XIII Reports, Recommendations and Resolutions

This Rule requires in paragraph 2 that Resolutions and Recommendations having policy, programme or financial implications for the Organization shall be brought by the Director-General to the attention of the Conference through the Council of the Organization for action. Some concerns include the following

- Does the Director-General have official status as an officer of GFCM and if not can he be bound by the Rules of Procedure?

- Should the Executive Secretary be responsible for forwarding the Resolutions and Recommendations to the Director-General for further transmission to the Governing Bodies?
- More importantly, the FAO Conference adopted amendments at its Thirty-sixth Session to the FAO Constitution which should be reflected in this Rule. They incorporated recommendations of the Immediate Plan of Action (IPA action 2.56) to include new reporting lines for the Technical Committees so they will report to the Council on programme and budget matters and to the Conference on policy and regulatory matters

Panel recommendations

1. The Agreement is weak and outdated and there are many fundamental areas that need improvement. The weaknesses and gaps identified are, or have a potential to be, major impediments to the effective and efficient functioning of the Commission and its ability to effect long-term sustainability of fisheries and sustainable development of aquaculture in the Region.
2. The GFCM Agreement should be reviewed and either amended or replaced by a new instrument. A decision on whether to amend the Agreement or replace it should be made taking into account the full range of deficiencies identified by the Panel.
3. The GFCM Rules of Procedure should be reviewed and amended taking into account current FAO rules and practice, “best practice” standards of other RFMOs, the inconsistencies with the Agreement as well as the inconsistencies within the Rules of Procedure, gaps and the failure to address certain areas of importance.

4. ANALYSIS OF THE PERFORMANCE REVIEW CRITERIA

4.1 Conservation and management

4.1.1 Status of living marine resources

Information on the status of living marine resources is taken from stock assessments carried out under the auspices of GFCM. The distribution of stock assessments indicates the priorities that were given to assessing stocks in certain GSAs, with the largest majority of stock assessments being from the northern and western GSAs in the GFCM Area. The distribution of stock assessments reviewed by the

SCSA during 2001 to 2008 (Appendix D from the Report of SAC 11) is shown in Figure 5, and similar information for the period 2005 to 2009 is shown in Figure 6.

A total of 135 assessments have been reviewed during 2005 - 2009, 65 for demersals and 70 for pelagic species. The table confirms that assessments are regularly done in only a few GSAs mostly in the northern and western parts of the GFCM areas. Anchovy, sardine, hake and mullets are the most frequently assessed species

The text in the remainder of this Part is based on information from the 2005 review of the State of Marine Fishery Resources prepared by FAO for FAO Statistical Area 37, the Mediterranean and the Black Sea²¹ as well as an analysis of more recent data for the species on which the SAC provided advice in 2008 to 2010.

European hake is one the most widely studied species in the Mediterranean. High mortality rates on juveniles generally lead to estimating an overexploited status, but recruits continue to be produced, and the evolution of landings in the Mediterranean suggests that recruitment overfishing is not occurring and that hake in the Mediterranean, comparatively speaking, has declined less than hake in the eastern Atlantic (see Figure 7 below). Elucidating the relative importance of increased escapement of juveniles and spawners remains an important focus for this and other Mediterranean demersal species, especially if the introduction of nursery areas and marine parks is to be considered. During 2008 – 2010, the SAC provided advice for hake on 7 GSAs (3, 5, 6, 7, 9, 15+16, and 26). All were diagnosed as overexploited with recommended reductions in F or in fishing effort as high as 60%.

²¹ <http://www.fao.org/docrep/009/y5852e/y5852e00.htm>.

Figure 5
 Stock assessments (2001-2008) Data Map Coverage

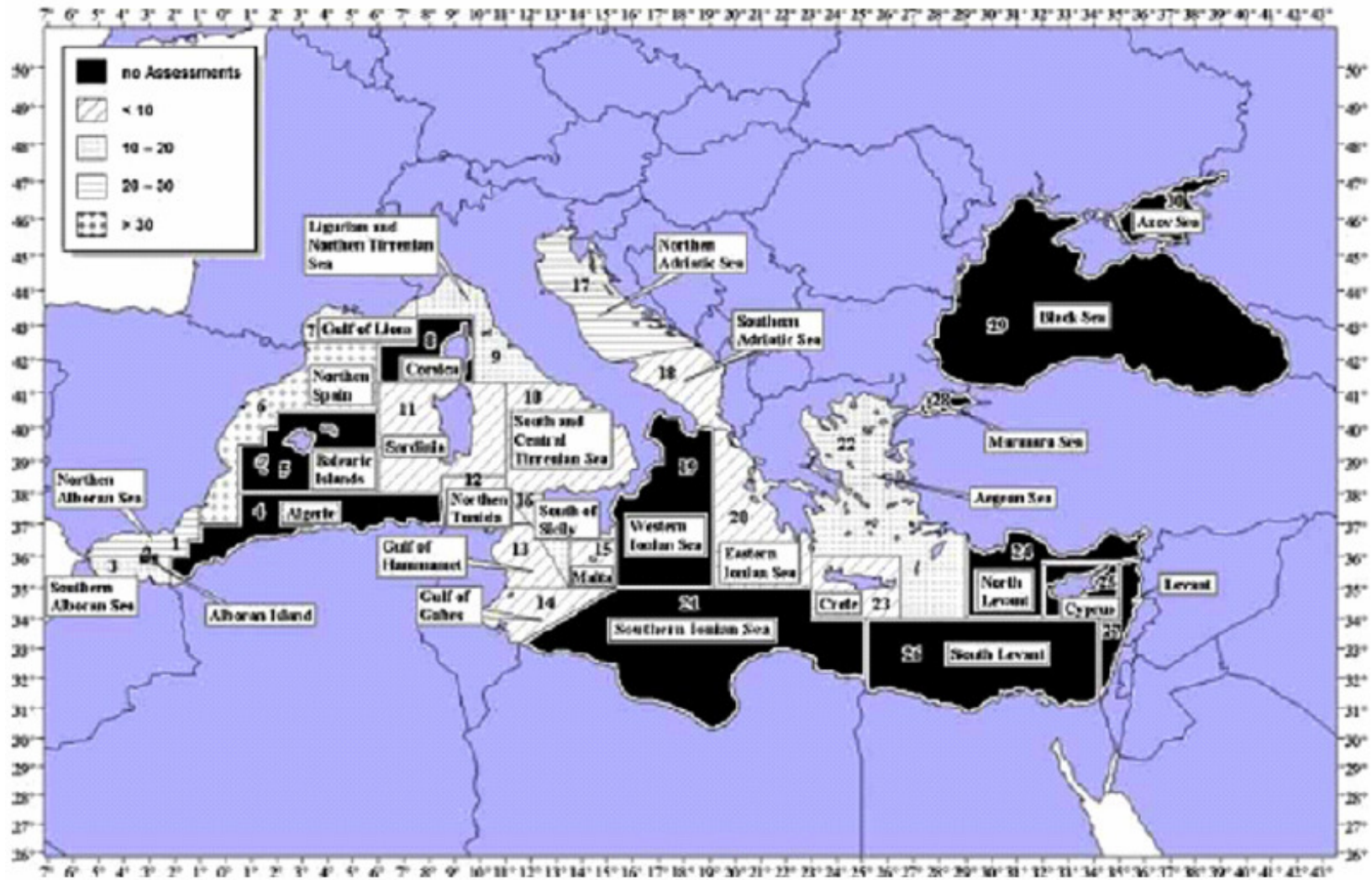
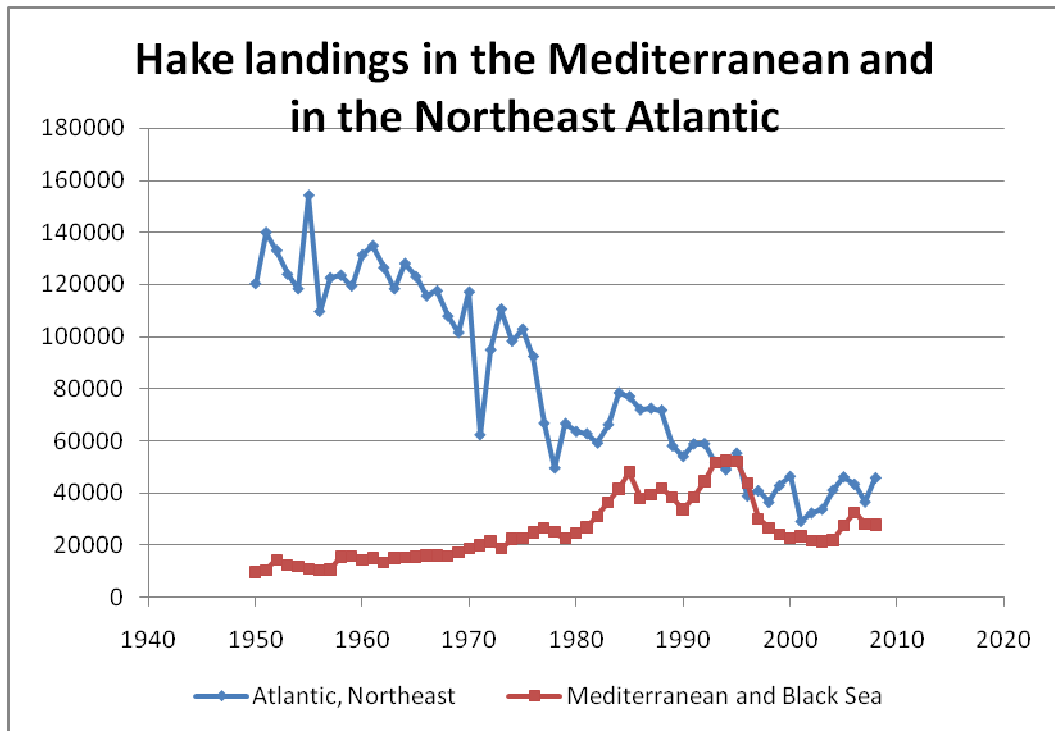


Figure 6
Stock assessments (2005-2009)

GSA number	Aristaeomorpa foliacea	Aristeus antennatus	Boops boops	Corallium rubrum	Dentex dentex	Lophius budegassa	Mullus barbatus	Mullus surmuletus	Merluccius merluccius	Nephrops norvegicus	Pagellus bogaraveo	Solea solea	Spicara smaris	Parapenaeus longirostris	Engraulis encrasicolus	Sardina pilchardus	Sprattus sprattus	Scomber japonicus	Trachurus trachurus	Total
1															5	5				10
2																				
3			1				1		1		1			1	1	2		1	1	10
4																				
5		4						5	6	1										16
6		3		1		1	2	1	4					3	5	5				25
7							1		4						5	5				15
8																				
9							1		3					1						5
10									1											1
11					1															1
12					1			1												2
13								1												1
14								1												1
15	1						1	1	1											4
16														1	4	4				9
17										1		1			7	7	2			18
18															3	2				5
19													1							1
20																				
21																				
22									1						4	2				7
23																				
24																				
25							1													1
26							1	1	1											3
27																				
28																				
29																				
30																				
	1	7	1	1	2	1	8	11	22	2	1	1	1	6	34	32	2	1	1	135

Figure 7

Hake landings in the Mediterranean and Northeast Atlantic



Red and striped mullets are exploited at age 0 in many areas. Very high exploitation rates have been recorded in Italian waters except for Sardinia and other areas of the Tyrrhenian Sea, but one or either species are apparently underexploited in some areas (e.g. southern Tunisian waters and in the Ionian Sea). During 2008-2010, the SAC provided advice for red mullet in nine GSAs and for striped mullet in four GSAs. For red mullet, two GSAs were considered moderately exploited, one fully exploited, and six were considered overexploited with advised reductions in F up to 76%. For striped mullet a group of three GSAs was considered moderately exploited, two GSAs were considered fully exploited and one GSA was considered overexploited.

Sparids and sea breams play an important role in Mediterranean demersal fisheries and are generally heavily exploited and possibly overexploited (e.g. Tunisian waters, Gulf of Lions). Groupers appear to be one of the demersal species least resistant to heavy exploitation, and catch rates have declined in a number of areas. During 2008 – 2010, the SAC provided advice for *Boops boops*, *Dentex dentex* and *Pagellus bogaraveo* in one GSA each. *Boops boops* were estimated to be overexploited, *Dentex dentex* underexploited, and *Pagellus bogaraveo* moderately exploited.

Soles were estimated to be fully exploited in the Gulf of Lions and in Tunisian waters in the FAO review. The SAC provided advice for sole in GSA 17 which was found to be overexploited. There was no consensus on the need to reduce F by some 80%.

Cephalopods are important incidental catches in trawl fisheries and there is a directed fishery for octopus in some areas. A high proportion of short-lived species (squids, cuttlefish and octopus) in demersal catches from heavily fished areas such as the Adriatic tends to suggest that exploitation is high, where low catch rates are in part compensated by high unit prices. The SAC did not provide advice on cephalopods during 2008 - 2010.

Norway lobster The SAMED project concluded that this species is slightly overexploited or fully exploited in most GSAs. During 2008 – 2010, the SAC provided advice on nephrops in two GSAs: one was considered moderately exploited, the other overexploited with advice to reduce F by 65 to 75%.

Red shrimp is intensely exploited in the Western Mediterranean by bottom trawlers fishing the continental slope together with significant catches of giant red shrimp. During 2008 – 2010, the SAC provided advice on three shrimp species (*Aristaeomorpha foliacea*, *Aristeus antennatus* and *Parapenaeus longirostris*) in seven GSAs: two were fully exploited, four were overexploited, and one was depleted.

Anchovy and sardine seem to fluctuate in patterns that are not obviously related to fishing intensity. Those species have been regularly assessed by the SAC in a few GSA's. During 2008 – 2010, the SAC provided advice for anchovy in seven GSAs and for sardine in six GSAs. For anchovy, two GSAs were moderately exploited, three were fully exploited, and two were overexploited. For sardine, two GSAs were moderately exploited, two were fully exploited and two were overexploited. There was a large change in the perception of stock status between the 2009 and 2010 advice for sardine in GSA 17.

Horse mackerel are apparently not heavily fished, and their biomass appears to be variable, presumably responding to environmental changes, but information is scarce. The SAC did not provide advice on horse mackerel during 2008 – 2010.

Sardinellas and silversides also show long-term fluctuations in the Mediterranean suggesting long-term periodic fluctuations may be occurring in environmental conditions superimposed on the anthropogenic effects. A continuous increase of Sardinellas (tropical) and the apparent decrease of sprat (boreal) can indicate a global warming process in the eastern Mediterranean. The SAC did not provide advice on sardinellas and silversides.

Bluefin tuna and swordfish are the most important large pelagic species in the Mediterranean. They are assessed by the ICCAT. Both are considered overexploited.

The status of stocks in the Azov and Black Seas is poorly known. While fishing certainly has an effect on stock status, environmental degradation is a considerably more important factor. Illegal fishing remains one of the most important unresolved issues for all Black Sea coastal states.

Panel analysis

During 2008 to 2010, the SAC determined the status and provided advice for 48 species and GSA combinations. Of these, one was underexploited, eight moderately exploited, 11 fully exploited 27 overexploited and one depleted. These results are illustrated in percentages in Figure 8.

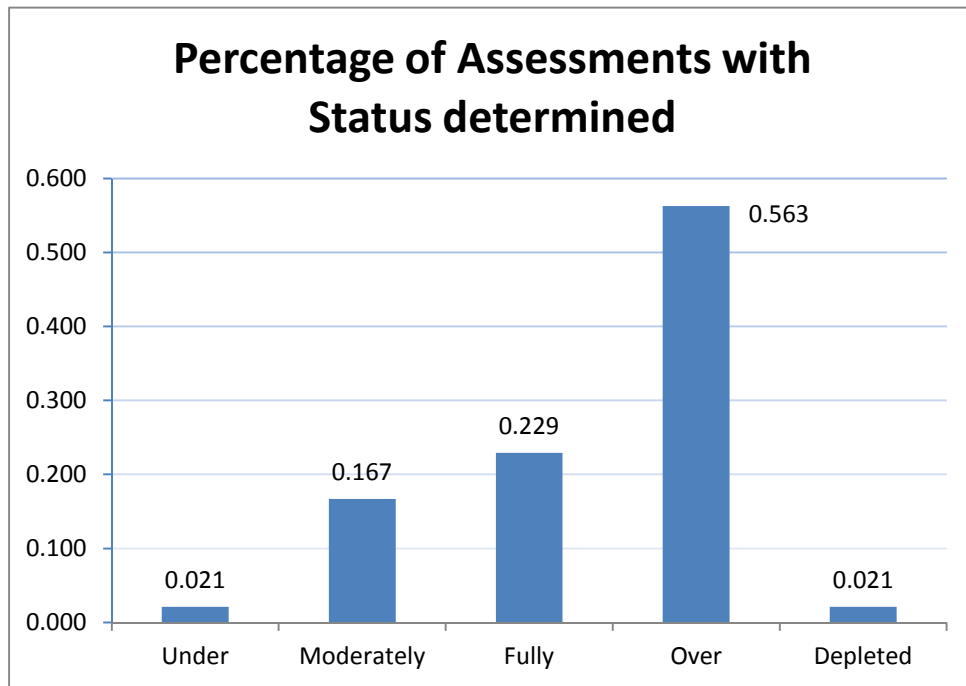
With 81% of the status determinations being fully exploited, overexploited or depleted, these results are consistent with a recent review by the European Commission²² where more than 54% of the Mediterranean fish stocks analysed by scientists were found to be overfished compared with 56% in the figure above. The status of fish stocks in the Mediterranean, however, is slightly worse than those reported in FAO (2005) where about 75% of the status determination worldwide were in that category. Given the methodologies used, the difference is unlikely to be statistically significant.

The SAC has invested considerable energy in trying to agree on a framework to identify reference points and to agree on reference points for specific GSAs, but it has been unable to agree on a consistent and comprehensive set of reference points to determine the status of the fishery resources it assesses. Considering that the assessments are based on GSAs that do not necessarily correspond to biological units, the failure to agree on reference points is not necessarily a negative outcome.

Status determination is generally made with respect to growth overfishing, because most are based on yield per recruit analyses. Growth overfishing can often be considered a minor sin, and moderate growth overfishing is in fact one of the choices that are available to fisheries managers. It is recruitment overfishing that needs to be avoided at all cost. However, the “per recruit” analyses which are most often done for fish stocks in the Mediterranean can be used to detect growth overfishing but they provide no information by themselves on the risk of recruitment overfishing.

²²<http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/703&format=HTML&aged=0&language=EN&guiLanguage=en>

Figure 8
Percentage of Assessments with Status determined



There are few resources for which data would be sufficient to assess if recruitment overfishing is occurring, but the continued production of the large majority of species suggests that few occurrences, if any, have materialised. This, however, does not mean that the resources are safe from recruitment overfishing – recruitment overfishing and fishery collapses could be around the corner. Misguided well-intentioned management measures could in fact precipitate recruitment overfishing e.g. by attempting to decrease exploitation on juveniles which might result in increased exploitation on larger mature individuals with unpredictable consequences in terms of recruitment. Well chosen Marine Protected Areas (MPAs) or closed areas are unlikely to have those negative and unpredictable consequences however.

Stock assessments must correspond to meaningful biological units if the effect of exploitation is to be adequately estimated. The difference in assessment results between the 2009 and the 2010 advice for sardine in GSA 17 may be an illustration of this importance. The 2009 advice, based on partial data for the GSA, suggested the resource was severely overexploited and called for a large decrease in fishing mortality. The 2010 advice, based on more data from the two main countries harvesting the resource, found the stock to be fully exploited and recommended no increase in fishing effort.

Panel recommendations

4. Most of the assessments units used by the SAC to provide management advice are based on GSAs. It is generally not known if these assessment units actually correspond to meaningful biological units. Results from stock assessments that are not based on meaningful biological units may be misleading. The SAC should give high priority to the identification of meaningful biological units.
5. Until meaningful biological units have been identified, the SAC should refrain from conducting assessments on parts of biological units or on entities that correspond to more than one biological unit.
6. The identification of meaningful biological units may indicate that coordinated management may be necessary in more cases than previously believed. Once meaningful biological units have been defined, the SAC should define reference points to prevent recruitment overfishing. Meaningful biological units may include more than one species.
7. Until meaningful biological units have been defined, the SAC should provide advice, on a multispecies basis, to make improvements under the four components of sustainability: improve the state of exploitation the resource, improve the economic benefits derived from fishing, improve the social benefits derived from fishing and improve governance.

4.1.2 Data collection and sharing

GFCM, through the SAC, has made considerable progress in data collection. In 2001, a statistical geographical pattern using units of 30' x 30' or multiples of these units was agreed as well as the multidisciplinary approach to the development of these statistical systems. In 2002, the process to identify operational units was begun while attempts to collect socio-economic data and data on fishing effort in a standardised manner began in 2003. Operational units were agreed in 2005 while emphasis was put on the standardisation of fishing effort in 2006. In 2007, the SAC identified the need for a GFCM Regional Fleet Register as an essential tool in monitoring fishing capacity and in implementing responsible fisheries management. In 2008, the SAC suggested that the Regional Fleet Register should be made operational by 1 January 2010 and should include relevant fleet capacity monitoring tools, such as dynamic charts on fleet capacity in terms of gross tonnage (GT) and power (kW) and other data browsing facilities.

Panel analysis

Importantly, the SAC motivated, and with the help of the FAO Regional projects and the EU, made possible a substantial increase in the collection of data and information from the fisheries, and on the resources through bottom trawl and acoustic surveys. While progress in data collection remains to be made in several countries, the amount of data and information collected has improved substantially over the last few years. Progress on data sharing has been slower, particularly for survey results. This, however, is understandable because assessments are done on a GSA basis, and there is little apparent need to share the information on the resources.

In several countries, scientific surveys using bottom trawl for demersal species and acoustic detection for small pelagics have been conducted for several years, sometimes from as early as the mid 1990s. The results from those surveys where the protocols and operating procedures have been standardised would provide a good basis to evaluate the status of stocks and could also be use in identifying meaningful biological units. Results for some of the surveys are available at http://www.ifremer.fr/Medits_indices/, but the data are in a summarised form and not in a format that allows independent analyses.

Panel recommendations

8. Data collected during standardised trawl and acoustic surveys should be made available in a format that allows independent analysis and should be analysed to identify meaningful biological units.
9. Consideration should be given to extending the MedFisis project in order to fully meet its original objectives.

4.1.3 Quality and provision of scientific advice

The structure of Mediterranean fisheries with small fleets, a large number of species in individual catches and dispersed landing points makes it difficult and expensive to obtain data for traditional stock assessment purposes. As indicated above, assessments have been consistently produced for only a few GSA – species combinations, and it is not known whether the assessment units correspond to meaningful biological units. If they do not, the results of assessments reviewed by SAC (and thus the associated scientific advice) may be misleading.

Panel analysis

The quality of the assessments varies considerably – some are based on opportunistic sampling for length composition in a limited number of landing sites that may or not be representative of the entire GSA, while others are based on systematic and comprehensive sampling including using stock size indices from the commercial fishery, from fishery independent surveys or from both.

Assessments are based on Length Cohort Analysis, Yield-per-Recruit Analysis, non-equilibrium surplus production models, VPA (XSA and Laurec-Shepherd), trawl survey estimates, either biomass or numbers as well as estimates derived from SURBA, acoustic and egg (DEPM) survey. During the SAC assessment meetings, there is some discussion of the assessments but no in depth examination of the data, methods and results. The conclusions of the authors are occasionally challenged, but not frequently. Most of the discussion is about the management advice, its consistency with previous advice for the same GSA, and its actual formulation.

The form of the advice, as contained in yearly summaries varied over time. This could be the result of adjustments made following requests from the recipient of the advice, or it could have been self-generated by the SAC. The recent (since 2008) inclusion in the document summarising the advice (e.g. GFCM:XXXIV/2010/4) of an appendix table giving the results of the assessment process (WG advice, WG comments, SCSA comments, SAC comments) is very helpful and transparent.

The SAC has for a long time fully recognised the need for multispecies analyses in a multidisciplinary context but it has proven difficult to find a mode of operation that would deliver such analyses and advice. Historically, this may have been due to lack of data and institutions. However, for the last 10 years or so, considerably more data have been collected and the SAC does provide an appropriate forum for these analyses to be done, reviewed and for advice to be formulated from them.

Panel recommendations

10. The reliability of the SAC assessments should be independently evaluated by comparing successive assessments, evaluating the data and methodologies of individual assessments and taking into account the known or inferred biological unit to which the assessment refers.
11. The Panel endorses and re-iterates the recommendations of previous reviews of the SAC that the characteristics of the GFCM Region are such that a relatively heavy scientific structure with numerous subcommittees, WGs, expert groups or other subsidiary bodies may not be appropriate. Although the SAC has recognised this and has attempted to adjust its present structure and *modus*

operandi to the reality of the Region, it remains a relatively heavy structure. Fewer subcommittees but more focussed *ad hoc* WGs with targeted participants could encourage and foster more the multidisciplinary and multispecies approaches where GFCM could achieve real progress.

4.1.4 Adoption of conservation and management measures

The SAC advice for fisheries management can generally be found in a single document for each year, except for 2001, under the heading “Management of Mediterranean Fisheries” on the meeting document page of each GFCM meeting (<http://www.gfcm.org/gfcm/topic/17100/en>), e.g. for GFCM 34 in 2010, scientific advice for fisheries management can be found at http://151.1.154.86/GfcmWebSite/GFCM/34/GFCM34_2010_4-e.pdf . In some years the document covers also advice on aquaculture, but in most years, it is restricted to advice on fisheries management. In the early versions of this document, administrative, organisational recommendations as well as fisheries management recommendations were included. In later versions, only fisheries management recommendations were included.

In 2001, the SAC recommended (SAC 4, para. 33) “to GFCM to set up a *minimum* legal size at length of first maturity as a principle to be applied for all the region, with the precautionary approach.” The SAC (SAC 4, para. 36) identified three shared stocks of hake (Gulf of Lions, Adriatic, Sicily Channel), two of anchovy (Gulf of Lions, Adriatic) one each of sardine, sprat, red mullet, blue whiting and bogue, all in the Adriatic, and three shared stocks of large pelagics. The SAC also agreed (SAC 4, para. 38) that multi-species assessments and ecological approaches in fisheries studies should be encouraged. The SAC expressed some disappointment (SAC 4, para. 43) that “little assessments have been made and not much useful recommendations can be done for fisheries management”.

In 2002 the SAC (SAC 5, para. 50) assumed that growth overfishing was occurring and recommended “to implement temporary closure of the identified hake nursery areas. Trawling effort limitation in space and time could further be useful for the hake and the other species of the fishing assemblages”.

In 2003 (SAC 6, para. 15), 2004 and 2005 there was no specific recommendation for fisheries management.

In 2006 (SAC 9, para. 45) the format of the assessments and related scientific advice was revised (SAC 9, para. 49) including the option to evaluate different options or scenarios when making fisheries management. With respect to the implementation of a 40 mm square mesh in the codend of bottom trawls the SAC noted (SAC 9, para. 50) “the need that it be progressively implemented in

order to allow certain countries to complete the gathering of information necessary to evaluate with further study the impact of such a measure on different fisheries and areas, taking into account the multispecies nature of most Mediterranean fisheries as well as local specificities, and to ascertain the short and long-term socioeconomic consequences of this measure”.

In 2007, the SAC provided advice in a tabular format. Shared stocks were defined (SAC 10, para. 40) as “a group of exploitable organisms, distributed over, or migrating across, the maritime boundary between two or more national jurisdiction, or the maritime boundary of a national jurisdiction and the adjacent high seas, whose exploitation is carried out by more than one Country and which can only be managed effectively through cooperation between all concerned States”.

In 2008, sardine in GSA 17 was described as being in “an obvious state of overexploitation” (SAC 11, para. 42) stressing “the need to take drastic measures.” The SAC also agreed that “Unless proven unnecessary by sound scientific evidence, a reduction of at least 10 percent of fishing effort on demersal species shall be applied for all GFCM GSAs as a precautionary measure.” The subsequent assessment, incorporating more data from the two main countries fishing this resource determined that the resource was fully exploited and that fishing effort should not be increased.

GFCM’s responses to the SAC advice are found in the compendium of GFCM decisions (<http://www.gfcm.org/gfcm/topic/16100/en>).

GFCM has adopted eight recommendations on conservation and management measures since the creation of the SAC, three recommendations on data and information reporting, and seven resolutions since the creation of the SAC.

Based on the SAC advice, GFCM adopted conservation and management recommendations on:

- the establishment of a Fisheries Restricted Area in the Gulf of Lions to protect spawning aggregations and deep sea sensitive habitats;
- the minimum mesh size in the codend of demersal trawl nets;
- the mesh size of trawl nets exploiting demersal resources;
- the management of certain fisheries exploiting demersal and small pelagic species;
- the establishment of a closed season for the dolphin fish fisheries using Fishing Aggregation Devices (FADs);
- the establishment of fisheries restricted areas in order to protect the deep sea sensitive habitats;
- the management of certain fisheries exploiting demersal and deepwater species;

- the management of selected demersal and small pelagic species.

On data and information reporting, based on the SAC advice, GFCM adopted Recommendations on:

- the implementation of the GFCM Task 1 statistical matrix;
- the establishment of the GFCM regional fleet register.

GFCM also adopted Resolutions on:

- the management of demersal fisheries in the GFCM area;
- the establishment of GSAs in the GFCM area;
- reporting on the implementation of GFCM management measures;
- 40mm square mesh size in codend of trawlnets exploiting demersal resources;
- the Pelagos sanctuary for the conservation of marine mammals;
- data confidentiality policy and procedures.

Panel analysis

While the number of fisheries management decisions is small, it should be considered in the context of the Mediterranean where, except for bluefin tuna, fisheries are managed by effort control and technical measures rather than catch control and where, except for large pelagics, most of the fishing takes place within territorial waters.

The SAC advice is generally based on assessment of resources based on GSAs, and except for a few instances of broad scale advice for the entire Mediterranean, the advice resulting from the advisory process applies to only one or a few countries. It is not clear what role GFCM would or should play with respect to fisheries management advice that does not apply to all of its Members. It is frustrating for scientists to invest considerable time in doing assessments, reviewing them, and formulating advice that is apparently not useful to the Commission because it is not endorsed.

Panel recommendation

12. GFCM should consider requesting advice only for those resources that involve more than one of its Members and where it intends to take coordinated management action.

Appendix 1 indicates that the Performance Review should assess the extent to which the GFCM

- i. has adopted conservation and management measures for both target stocks and non-target species that ensures the long-term sustainability of such stocks and species and are based on the best scientific evidence available;
- ii. has applied the precautionary approach as set forth in UNFSA Article 6 and the Code of Conduct for Responsible Fisheries Article 7.5, including the application of precautionary reference points;
- iii. has adopted and is implementing effective rebuilding plans for depleted or overfished stocks;
- iv. has moved toward the adoption of conservation and management measures for previously unregulated fisheries, including new and exploratory fisheries;
- v. has taken due account of the need to conserve marine biological diversity and minimize harmful impacts of fisheries on living marine resources and marine ecosystems;
- vi. has adopted measures to minimize pollution, waste, discards, catch by lost or abandoned gear, catch of non-target species, both fish and non-fish species, and impacts on associated or dependent species, in particular endangered species, through measures including, to the extent practicable, the development and use of selective, environmentally safe and cost-effective fishing gear and techniques.

As indicated above, based on SAC advice, GFCM has adopted conservation and management measures for the main species in the Mediterranean fisheries (REC GFCM/2009/1), it has made several attempts at adopting reference points but has yet to be successful, it has adopted a rebuilding plan for bluefin tuna, it has adopted *omnibus* management measures that would afford protection to previously unregulated species (RES GFCM/2009/1, REC GFCM/2002/1), it has taken due account of the need to conserve biodiversity and it has adopted measures to minimize the impact of fishing on associated or dependent species (several REC and RES on gears and mesh sizes) and to protect sensitive habitat and ecosystems (REC GFCM/2005/1, REC GFCM/2006/3).

The Panel concludes that GFCM has achieved progress under the six criteria above. However, as discussed under monitoring, control and surveillance, there are few means to verify that the conservation and management measures adopted by GFCM have been effectively applied in the field by member countries.

4.1.5 Capacity management

A recent review of capacity management in the GFCM area (discussed in

http://151.1.154.86/GfcmWebSite/GFCM/34/GFCM34_2010_inf.10-e.pdf) found that:

- most countries seem to have the tools (laws and regulations) to manage capacity one way or the other;
- all countries that replied have a fleet register and are able to monitor entry and exit in the fleet. Many update their register in real time based on several sources of information;
- capacity is most often defined as GT and kW, but other more general definitions can be found;
- licensing exists in most if not all countries schemes. They may apply to fishermen, to fishing vessels, to both, or to fishing vessel owners;
- consistent with the observation that the fleets are old, there are plans to modernise them in several countries;
- the artisanal sector is very important in several countries;
- it will be a challenge to modernise the fleets without substantially increasing their ability to kill fish, i.e. their fishing capacity;
- few countries have explicitly and formally evaluated if their fishing capacity was commensurate with the productive capacity of the fishery resources to which they have access;
- GFCM could be an appropriate forum to explicitly and formally evaluate if fishing capacity is commensurate with the productive capacity of available fishery resources;
- the evaluation of fishing capacity versus the productive capacity of available resources should be made in the context of the modern concept of sustainability with the aim of improving conditions under the four components of sustainability (bio-ecological, social, economic, and institutional).

This review was discussed at an SCESS/SCSA/SCSI Transversal Workshop on the Assessment, Management and Monitoring of Fishing Capacity in the GFCM Area Rome, Italy, 17-19 February 2010. The participants agreed that the successful implementation of the Regional Fleet Register is fundamental in developing a fishing capacity monitoring and management scheme within the GFCM Area. The Workshop identified as an option a freeze on fishing capacity as soon as possible based on scientific evidence, best practices and lessons learned.

Panel analysis

Many GFCM Members have made the important first step of implementing national fleet registers, but few have evaluated if their fishing capacity was matched to the resources available to their fleets. Considering the many fleet renewal programs that are either under way or planned, there appears to be

an implicit assumption that capacity can be increased (new vessels have generally more fishing capacity than those they replace).

Panel recommendations

13. While several GFCM Members may have a genuine need to renew their fleets for economic and safety reasons, there is also a real danger that overcapacity will result with potentially severe consequences for the sustainability of the fishery resources. Based on the SAC assessments, there appears to be limited scope to increase fishing capacity. However, as noted, the resources in large portions of the GFCM area have not been evaluated. Great care should therefore be exercised in renewing fishing fleets.

4.1.6 Compatibility of management measures

The UNFSA, in Article 7 “Compatibility of conservation and management measures”, requires that coastal States and the States whose nationals fish the same stocks in the adjacent high seas area shall seek to agree upon the measures necessary for the conservation of these stocks and that conservation and management measures established for the high seas and those adopted for areas under national jurisdiction shall be compatible, taking into account the biological unity and other biological characteristics of the stocks and the relationships between the distribution of the stocks, the fisheries and the geographical particularities of the region concerned, including the extent to which the stocks occur and are fished in areas under national jurisdiction.

Panel analysis

The assessment and management units used in the GFCM area appear to conform more to political boundaries rather to the biological boundaries of distinct fishery stocks. Management measures adopted by GFCM, however, appear to apply both in national waters and on the high seas. In that sense, compatibility appears to have been achieved. Therefore, there are no Panel recommendations

4.1.7 Fishing allocations and opportunities

Except for large pelagics (bluefin tuna and swordfish) where Total Allowable Catches (TACs) are not being implemented by GFCM but are being managed by ICCAT, the fisheries are managed by fishing effort control. GFCM has not initiated a process of identifying effort allocations to its Members in accordance with Article III(b)(i) of the Agreement. Therefore, fishing allocations and opportunities are not directly relevant to the GFCM situation at this time. Consequently, there is no Panel analysis or recommendations.

4.2 Aquaculture

4.2.1 Status of aquaculture

The Mediterranean aquaculture production has increased extensively over the past 10 years (25% per year) and now constitutes a credible alternative to fishing, as described in Part 2.2.3. Presently aquaculture production is more than 200 000 tonnes per year for marine production and more than 500 000 tonnes for brackish water production (without the freshwater production, which is also quite important in countries such as Egypt, Turkey and Italy). It complements fisheries production in the Mediterranean (1,6 million tonnes) and is becoming one of the main sources of aquatic products for the countries of the Region.

Added to this is the importance of international exchanges of marine aquaculture products in the Region: about 90 % of the exported production is exported, mainly from Greece and Turkey, to places within the region. This regional market is not only for products delivered for consumption, but also for fry and fingerlings, with some countries exporting up to 75 % of its fry production.

This steady increase of aquaculture production and marketing in the Mediterranean was the main reason for the proposal discussed in the 1992 Session of GFCM for establishing a specific committee for aquaculture in 1995 as described in Part 2.1.3.

4.2.2 Establishment and priorities of the CAQ

GFCM is mandated under Article III (1) (g) of its Agreement to promote programmes for marine and brackish water aquaculture and coastal fisheries, and is one of five RFBs having aquaculture responsibilities.²³

Initially, aquaculture was the focus of the Mediterranean Regional Aquaculture Project (MEDRAP), funded by the United Nations Development Program (UNDP) and the Government of Italy from 1980 until 1995. This project was initiated for boosting aquaculture development in the Mediterranean countries through actions such as institution building, implementation of national programmes of development, building of hatchery facilities, research stations and fish farms and training scientists and technicians.

In addition, MEDRAP implemented several networks, either for training of experts or for exchanging information. At the end of the project, these networks were shared among different bodies, under the general coordination of GFCM. The following networks were established:

²³ The other four RFBs are: the Committee for Inland Fisheries and Aquaculture of Africa (CIFAA), the European Inland Fisheries Advisory Commission (EIFAC), the Lake Victoria Fisheries Organization (LVFO), the Latin American Organization for Fisheries Development (OLDEPESCA).

- SELAM and TECAM, which operate under the CIHEAM (which maintains the training activities related to these networks in cooperation with GFCM);
- SIPAM, which operates directly under GFCM.

Another network, EAM, was under the Priority Action Plan/ Regional Activity Centre (PAP/RAC) of the Mediterranean Action Plan of UNEP (MAP) in Split, Croatia, but had very few activities and was operational for only two years. The basic budget of the RAC came from the national budget, and as there was not strong support from the MAP itself, the RAC did not give a high priority to this new project. Its objectives were restored under the CAQ WGs described in Part 2.1.3.

In 2006, it was agreed at the Thirty-first Session of GFCM that activities of these networks would be carried forward under the three CAQ WGs established at that time. A good connection between GFCM and CHIEAM was maintained for organizing training.

During 2009 technical cooperation had been strengthened with the CAQ partners, the research institutions and fisheries administrations of GFCM Members, which contributed to the achievements of the main results of the CAQ subsidiary bodies. Enhanced cooperation had been established with IUCN on sustainability issues on aquaculture and guidelines. Cooperation with Eurostat has been also established on aquaculture statistical aspects and cooperation has been improved with the FAO Coordinating Working Party on statistics on aquaculture (CWP). The main FAO Services within the Fisheries and Aquaculture Department with which cooperation had been strengthened are: Fishery Aquaculture Service (FIRA), Fishery Statistics and Information Service (FIPS) and Fishery Product Trade and Marketing Service (FIMP).

The GFCM Members updated the mandate of the CAQ at the Thirty-third Session in 2009 and identified three main missions:

- collection and processing of data, dissemination of information;
- promotion of sustainable development and responsible management of aquaculture;
- enhancement of regional cooperation through cooperative research and training programmes.

These three missions were recognised by the GFCM Members as the main contributions of the CAQ for the development of aquaculture in the region, with a priority to be given to the collection and the dissemination of data, essential for both the production and the marketing of aquaculture products.

At the third CMWG meeting held in 2010, discussion took place on the main priority issues related to the aquaculture development in the Mediterranean, including: the integration of aquaculture into coastal zone management; the harmonisation of legislation on site selection and licensing procedures; the establishment of a sustainable reference system for aquaculture development; the promotion of market oriented production; the implementation of monitoring activities; and the improvement of data collection.

Panel analysis

The reasons which led to the establishment of the CAQ are still present and intensifying in importance commensurate with the increased aquaculture production. In this context, it would be useful for GFCM to review its overall work programme on aquaculture with an aim of updating and identifying priorities and making the programme more adequate to address recent needs including human and budgetary implications.

Most of the missions given to the CAQ are not covered by other networks or institutions. Most of the aquaculture networks established in the region only cover the European countries, and not the entire Region. This gives the CAQ a unique mandate and perspective for identifying gaps and needs in the entire Region, and for establishing cooperation with all other relevant organizations.

Panel recommendations

14. GFCM should review its overall work programme on aquaculture with an aim of updating and identifying priorities and making the programme more adequate to address recent needs including human and budgetary implications.
15. The CAQ should concentrate its activities on issues of strategic importance for sustainable regional aquaculture development and responsible management of aquaculture. To this end it should consider recommending the development of an aquaculture policy, to be shared among all Mediterranean countries, where strategic issues are discussed and adequately addressed.
16. The CAQ should continue to strengthen its collaboration with other networks and organizations and focus its attention on the important priority issues already identified.

4.2.3 Functions and organization of the CAQ, the CMWG and the WGs

The three functions identified in the CAQ mandate are described in Part 2.1.3.2, and relate to:

- assessment of information;

- promotion of common standards and guidelines on sustainable development and responsible management of aquaculture;
- identifying cooperative research and training programmes, and coordinating their information.

The CMWG is mandated under Rule X of the GFCM Rules of Procedure to, *inter alia*, “propose and/or update elements of the work plan for the activities of the CAQ during the intersessional period and organize accordingly the distribution of ad hoc Working Groups”. The three three output-oriented *ad hoc* Working Groups deal respectively with issues related to marketing, sustainability, and siting and carrying capacity, as noted in Part 2.1.3.2.

In general, the functions of the CAQ are too “objective oriented”; they simply repeat the relevant mandate and are not specific enough in terms of operational use, and should be revised.

It is noted that the third function of the CAQ (identifying cooperative research and training programmes with other organizations and coordinating their information) should be complementary to the general activities of external cooperation of GFCM itself. It should be clear that the cooperation with CIHEAM in terms of training, with ICSEM in terms of scientific conferences and with MAP for interactions between fisheries and aquaculture and the environment should continue to be coordinated by the Secretariat as a mission of the Commission under relevant MOUs.

The CAQ has worked well to discharge its duties, but there are areas where improvements could be made. It has recognized, for example that there is insufficient coverage of aspects of various aquaculture activities. For example, shellfish culture is often forgotten, interactions between fisheries and aquaculture is not really covered for all types of aquaculture including tuna, and the development of aquaculture for new species is not assessed enough. Furthermore, reports unveil a lack of relevant information in general, with insufficient information about locations and the lack of national marketing plans. The Commission has picked up these signals and is working on solutions. For example, within the WGMA, attention has been paid to the increasing competition of regions other than the Mediterranean due to globalization.

The CMWG and *ad hoc* WGs have carried out their respective mandates, described in Part 2.1.3,2 over a course of four years. During that time some operational concerns, based on the functions and organization of each, have emerged.

Some shortcomings have included the linkage between the main priorities identified for the CAQ missions and the orientation of the *ad hoc* WGs, the lack of clarity in the functions and division of

responsibilities among the *ad hoc* WGs. For example, the *ad hoc* WG on sustainability of aquaculture must take into account siting and carrying capacity as well as the marketing of products, which overlap with the responsibilities of the other *ad hoc* WGs.

The main objective of the CMWG is to ensure the coordination of the *ad hoc* Working Groups, which could include re-organization, prioritisation, streamlining and re-scheduling the various project proposals and activities identified through them, with an appropriate budget proposal. The CMWG meets annually whereas the CAQ meets biennially, and in the year when there is no the CAQ meeting the CMWG meets for three days instead of one day.

In fact, at the three day meetings the CMWG functions to coordinate and agree on workplans and strategies are expanded in the absence of the CAQ meeting. It makes a number of comprehensive recommendations, for example those made at its March, 2010 meeting included:

- Approach toward a sustainable development of Mediterranean aquaculture;
- The marine aquaculture activities in the Mediterranean should be considered among the regional priorities;
- Marketing as priority issue for the sustainable development of aquaculture;
- Monitoring and assessing environmental impact and interaction of aquaculture activities;
- Reporting of Aquaculture Data and Information.

The CMWG also identified a number of priority issues for consideration by the CAQ as described in Part 4.2.2. and addressed budget issues by recalling that all the activities indicated in the proposed workplan would be carried out proportionally on the basis of budget availability and budget allocation to the CAQ activities. It called for Members' research institutions and partners to ensure scientific contributions to the work and cooperate with the initiatives of the CAQ.

The three-day CMWG meetings are productive in terms of addressing the coordination of the Working Groups as described above, particularly in intersessional period, as mandated under Rule X of the GFCM Rules of Procedure.

However, the CMWG has spent significant amounts of time re-discussing the outcomes of the Working Groups and identifying general priority issues, rather than methodically considering gaps and needs, and how they could be met. In this context, and mindful of the benefits of focusing on key activities important for the region as a whole as well as on a periodic review of the functions and outcomes of the Working Groups, it could be useful for the GFCM to consider re-examining the

mandate of the CMWG to ensure that attention is consistently given to the broader task of providing a gaps assessment that would address evolving needs.

One important consideration in such a review would be amending the mandate of CMWG under the GFCM Rules of Procedure to require that it prepare a more detailed budget proposal for the work plan, including possible external funding (in cash and in kind), for consideration by the CAQ and then the Commission. It is understood that CMWG would also need to base their considerations on existing GFCM budget allocations in the intersessional periods when developing work plans.

As noted above, the CAQ, a subsidiary body of GFCM, meets once every two years. Meetings are very expensive because they require translation of documents and interpretation into English and French for each meeting. They are also labour-intensive for the Secretariat. However, CMWG does not have such obligations to provide translation/interpretation and other necessities required for GFCM meetings, so its meetings are able to be scheduled annually. In the short term, and to allow for broad participation in meetings relating to areas addressed by the CAQ, participation in the CMWG could be open to all interested GFCM Members.

Panel analysis

The functions, procedures and organization of the CAQ should be reviewed to ensure a focused, effective performance. The review should take into account the terms of reference of the CAQ, the frequency of meetings of the CAQ and a review of the functions and organization of the CMWG and the *ad hoc* Working Groups. There would be benefit in more clearly identifying the functions of CMWG, particularly in alternate years when the CAQ does not hold a Session, including a mandate to develop a detailed budget for consideration by the CAQ and the Commission. An assessment of gaps and needs and objectives for each Working Group should be included and any need for strengthened cooperation and coordination among the Working Groups should be identified. This could be done together with a review of the overall work programme of the CAQ, and be carried out in parallel with a full review and assessment of existing GFCM human resources recommended in Part 4.6.

Panel recommendations

17. The function and organization of the CAQ, CMWG and WGs should be reviewed, taking into account considerations provided in this report, with a view to clarifying their functions, organization and procedures in order to ensure the most effective outcomes.
18. Participation in the CMWG should be open to all interested GFCM Members as a short term measure to allow fullest consideration of the CAQ-related issues on an annual basis until such time as the Commission may take a decision to change the frequency of the CAQ sessions.

4.2.4 Aquaculture information system SIPAM

Information is key for the development of aquaculture by the GFCM Members. This information must cover all aspects of aquaculture development, including technical, biological, ecological and marketing information. SIPAM, a tool for information and promotion of aquaculture in the Mediterranean provides all necessary information (see Part 2.2.3) and has become the backbone of the other CAQ activities.

This system was formally established during MEDRAP and modernised and placed under the responsibility of the CAQ. It was initially a separate body, managed by a team hosted in Tunisia, mainly involved in day to day management of aquaculture. However the challenges of such a system in terms of objectives, priorities and financial/human needs and resources were not identified.

The Commission at its 27th Session in 2002 clearly recognized that the SIPAM Network was a valuable developmental tool for Mediterranean aquaculture, and that SIPAM could be considered as the GFCM Aquaculture Information System.

In 2004, the GFCM Members recognized that SIPAM had become a significant asset that would enhance the future development and management of responsible aquaculture management in the Mediterranean. This implied strong commitment by Members and the provision of financial support on a regional and national basis. It was agreed that additional and different skills would be necessary to bring SIPAM into the “information age” and that GFCM should re-locate the Regional Centre within the GFCM Secretariat in order to maximize resources and avoid a duplication of efforts.

SIPAM became the GFCM Aquaculture Information System²⁴ and all GFCM Members became SIPAM partners. The National Coordinators are nominated directly by the GFCM Members, to coordinate at national level efforts aimed at data transmission to the Secretariat. Responding to the demand for reliable data and information as well as for reporting on aquaculture developments in the Mediterranean remain a priority for aquaculture and for SIPAM.

SIPAM is now a tool for use by the three CAQ WGs as well as GFCM Members for aquaculture development and related purposes.

A new feature of SIPAM is the National Aquaculture Sector Overview (NASO). Using Google maps, it shows the locations where aquaculture is practised. Additionally, it provides useful information about that particular site. However, databases and the information collection are far from complete and the GFCM Secretariat is urged to support finalization of the process.

Panel analysis

SIPAM is becoming an extremely valuable tool to assist the development and management of regional aquaculture, and to reach the point where it is able to fulfil its potential and to achieve credibility among the GFCM Members.

In 2009, The Eleventh Session of SIPAM concluded that the role of SIPAM as official portal for data and information of aquaculture in the Mediterranean and Black Sea, should be enhanced in terms of, *inter alia*, the quality of the contents of the portal and of visibility of SIPAM.

When assessing means for improvement of the SIPAM, it is important to bear in mind its double mission both as a subsidiary body of the CAQ and as the CAQ Information System. The first mission is aimed at identifying priority issues for the improvement of the data reporting system and data information on aquaculture for CAQ/GFCM Members. The second aims at providing support and information (as an Information System with different tools such as the newly established web component) to the other subsidiary bodies of the CAQ.

The improvement of the quality of the contents of the reports will also serve to strengthen the collaboration between the National Coordinators and the GFCM Secretariat. It should be noted that data submission is considered as one of the major constraints faced by the SIPAM networks for many years. Although the data submission appears to have improved as a result of Recommendation GFCM/33/2009/4 on reporting of aquaculture data and information, communication with the National

²⁴ See www.faosipam.org.

Coordinators still remains a priority for the Secretariat since it should be continuous and not limited to data submissions prior to the annual session.

Coordination with other subsidiary bodies of the CAQ as appropriate and with GFCM would also strengthen the value of the SIPAM. For example, there are many points of interaction between the issues considered by the WGMA and SIPAM, in particular on data requirements, availability and analysis relating to the total aquaculture production, price, production centre and assessment of production and trends. These key points represent a tool for collection and dissemination of aquaculture market data within the GFCM area.

Cooperation with other international institutions involved in the aquaculture data collection, data storing and data reporting is essential to avoid duplication or misreporting. Normally, in many countries, the national experts involved in the statistics on aquaculture for the GFCM are the same person involved for other international bodies. The data collection and data submission to the Commission should be easy and not represent an overload of work.

In this regard since the Eleventh Session of SIPAM, the SIPAM data system has made progress on the harmonisation of standards for Mediterranean data collection (terms, data systems, recording), to advance the aquaculture component of the Coordinating Working Party on Fishery Statistics and in cooperation with Eurostat.

GFCM Members must formally nominate a National Coordinator to provide data and information to SIPAM, and the fulfilment of this responsibility as well as the ongoing timely provision of these duties is a vital foundation for the operation of the System. Members have a duty to ensure that these responsibilities are fulfilled. This was recognized at the Eleventh Session of SIPAM, where participants noted with concern that despite the fact that Members have an obligation to provide information on aquaculture production statistics, the availability of data remains insufficient. The GFCM Secretariat was requested to stimulate National Authorities to participate in SIPAM and improve the data collection.

Panel recommendations

19. In order to maximise the synergies between the activities of the WGMA and SIPAM, the WGMA should identify the data requirements for aquaculture market analysis, and the SIPAM and the GFCM Secretariat should identify the sustainability and the cost effectiveness of its data collection.

20. Cooperation between SIPAM and other international institutions, including the Coordinating Working Party on Fishery Statistics and Eurostat, should be further strengthened.

21. Innovations and improvements to SIPAM should continue to be considered, such as the following:

- introduce multilingual frame website and web facilities such as visible banners to permit a larger audience to available information;
- introduce an email alert in order to update the National Coordinators and aquaculture experts on the new information available and on the progress made by the other WGs on the different issues considered relevant for the Commission, as requested by the National Coordinators;
- make available the technical documents or reports on aquaculture that could be useful for the Members; this could also include available information on education and training on aquaculture in which the CHIEAM can play also a role;
- introduce “acquisition of information through questionnaires” to be compiled by the National Coordinators; this approach can help both the Secretariat and Coordinators in data storing, analysis and reporting; consequently the reports available in different formats could be a useful feedback service to the Nation Coordinators and Members.

22. Members should ensure that the National Coordinators are appointed in support of the SIPAM, and that they fulfil their duties in a full and timely manner.

4.2.5 Promotion of sustainable development and responsible management of aquaculture

The rapid development of aquaculture in the Mediterranean area could induce some problems related to the environment, the market and the economic situation of the producers.

To address these problems and prevent them, the CAQ decided to establish three WGs, WGSA, WGSC and WGMA as described in Part 2.2.3. They are quite active and hold regular meetings every year. In 2009, for example, eight meetings were organised in five countries. Most of the participants in the meetings are from research institutions, with the exception of WGMA, which includes some representatives of the industry.

The WGs have also initiated cooperative projects such as InDAM under WGSA, ShoCMed under WGSC and MedAquaMarket under WGMA. These projects are usually funded by GFCM Members. The CMWG coordinates the work, as described above and delegates are usually active also in the CAQ and of the WG, but it seems that there is no real policy for the nomination of persons attending these meetings.

Panel analysis

The CAQ generates a great deal of work for the GFCM Secretariat. Added to this workload, there appears to be confusion between the various roles of the CMWG, WGs, projects and the CAQ, particularly given the changing role of the CMWG in alternate years when the CAQ does not meet. The CMWG seems to play a role of coordination, but in fact the meeting is, in alternate years, more or less a second CAQ meeting, which lasts three days with discussions on questions already discussed in the WG meetings. The CMWG meetings consider very few proposals concerning priorities and coordination between the WGs and the projects activities.

The WG meetings relate to specific projects carried out under their respective responsibilities.

After reviewing the programmes of work carried out during the last four years it also appears that the WGs were mostly “intensive finfish oriented”. They did not pay enough attention to other marine production such as lagoon production and shellfishes, which are quite important in several countries. They are encountering specific problems, for example in terms of environment, siting and marketing, and could play an important role in future because they are less dependant on external inputs. The WGSA and the CAQ have recently identified lagoon management as a new project to be developed, but such an analysis should also be made for shellfish production.

Panel recommendation

23. Consideration should be given to supporting the promotion of sustainable development and responsible management of aquaculture through the strengthening of the role of the CMWG, which should include, on a continuing basis, provision of an overview for the WGs, including setting priorities and ensuring coordination and recommending the mechanisms for such promotion.

4.3 Compliance and enforcement

The criteria assessed below fall under a broader umbrella of the GFCM Control and Enforcement Scheme, and general needs and principles were agreed in 2005 in Resolution GFCM/30/2005/2 General guidelines for a GFCM Control and Enforcement Scheme: needs and principles.

They were further considered by the CoC at its Sessions in 2007 and 2008 for the adoption of a Control and Enforcement Scheme. Its aim was to ensure a high degree of compliance with relevant conservation measures, as well as legal certainty and security for any concerned vessel. It elaborated a number of principles including consistency with the provision of the GFCM Agreement and international law. There were four main components:

- flag State duties, including measures for the control of vessels, establishment of a national record of fishing vessels, implementation of Vessel Monitoring System (VMS) and regulation of transshipment;
- obligations of the Contracting Parties and Cooperating non-Contracting Parties, including reporting and compliance with GFCM conservation and management measures;
- compliance and enforcement, where an observation and inspection programme would be established which may include high seas inspection, port inspection, monitoring programmes and observer programmes;
- a programme to promote compliance by vessels of non-Contracting Parties through the implementation of relevant parts of the FAO IPOA-IUU and the prohibition of landings and transshipments of GFCM species by vessels of non-Contracting Parties sighted in the GFCM Area.

4.3.1 Flag State duties

The extent to which GFCM Members are fulfilling their duties as flag States, both under the Agreement and international instruments, is difficult to assess. As noted under Part 4.3.4 relating to the follow-up on infringements, many Members are unable or unwilling to provide, in a timely manner, relevant information to the Secretariat as required under binding Recommendations including those that relate to flag State duties. There are no specific requirements on flag State duties in the GFCM Agreement.

The Recommendations, listed under Part 4.3.3 on MCS, are themselves consistent with, and implement to a great degree the modern international fisheries instruments. Those of special relevance to flag State duties include actions and measures relating to the management of fishing capacity, the

establishment of an Authorized Vessel List, the agreement to install a VMS system and the role of the flag State under the Regional Scheme on port State measures.

Although GFCM has carried out reviews of fisheries-related legislation of its Members, there has been no review of flag State investigation of, follow-up to, and report on actions taken in response to an alleged violation of any GFCM conservation and management measures.

Panel analysis

Although the GFCM Agreement does not refer to flag State duties, there are several Recommendations that incorporate the role and duties of flag States. However, given the minimal reporting by many Members, it is difficult to assess the effectiveness of their implementation.

Panel recommendations

24. An assessment of the implementation of the flag State duties in the GFCM Recommendations should be carried out, and recommendations made for effective implementation by Members of these flag State duties.
25. Flag States' roles and duties should be included in any revision to or replacement of the GFCM Agreement, drawing on relevant provisions of the UNFSA, the IPOA-IUU and the FAO Port State Measures Agreement.

4.3.2 Port State measures

Port State measures had increasingly become the focus of attention in international and regional fora as the safest, most cost effective and efficient way to tackle IUU fishing since COFI endorsed the 2005 FAO Model Scheme on Port State Measures to Combat IUU Fishing. The FAO Agreement on Port State Measures was developed between 2006 and 2009, and during that period GFCM held a Workshop on Port State Measures in December, 2007 which developed a Recommendation for a GFCM Regional scheme on port State measures based on the voluntary Model Scheme and the progress in developing the binding agreement. The Recommendation was adopted by the Commission in 2008 (see Part 4.3.3 below), and the FAO Port State Measures Agreement was open for signature in 2009.

The objective of the GFCM Recommendation was to contribute to the long-term conservation and sustainable use of living marine resources in the GFCM Area through strengthened, harmonized and

transparent port State measures to combat IUU fishing, and it included requirements for Members to designate ports for landing by foreign fishing vessels and for the GFCM to maintain a register of ports. There were also national requirements for information to be required of vessels, inspection and denial of use of ports, among other things. The Recommendation is consistent with the final Agreement and could be a useful MCS tool but no information has yet been received for the GFCM register or on the implementation of the Recommendation.

Panel analysis

The GFCM Recommendation on port State measures adequately reflects the provisions of the final FAO Agreement and the characteristics of the Region. However, very few Members had submitted their national reports on the status of implementation of GFCM decisions prior to the Thirty-fourth Session of GFCM in 2010, and this situation did not allow for the Secretariat to conduct a thorough analysis of their content.

Panel recommendation

26. The CoC should establish the level of compliance by Members with the GFCM Recommendation on port State measures and as appropriate develop mechanisms and priorities to strengthen the compliance.

4.3.3 Monitoring, control and surveillance

GFCM has adopted integrated MCS measures to a credible extent, given the diverse nature of fisheries in the Mediterranean. The measures appear to have been based more on the provision, analysis and dissemination of information and cost-effectiveness, and do not relate to trade or marketing which may be more appropriate for single-species and/or high-value fisheries.

The Control and Enforcement Scheme, however, contains longer-term components that may pave the way for incrementally stronger MCS Recommendations on compliance and enforcement, by suggesting the establishment of an observation and inspection programme which may include high seas inspection, port inspection, monitoring programmes and observer programmes. The MCS-related Recommendations adopted by the Commission are shown below.

- GFCM/34/2010/1 Concerning the establishment of a GFCM logbook (to be fully effective in 2013)
- GFCM/34/2010/2 On the management of fishing capacity

- GFCM/33/2009/5 On the establishment of the GFCM regional fleet register
- GFCM/33/2009/6 Concerning the establishment of a GFCM record of vessels over 15 metres authorized to operate in the GFCM area amending the recommendation GFCM/29/2005/2
- GFCM/33/2009/7 Concerning minimum standards for the establishment of a VMS in the GFCM area (to be fully effective in 2011)
- GFCM/33/2009/8 On the establishment of a list of vessels presumed to have carried out IUU fishing in the GFCM area repealing recommendation GFCM/30/2006/4
- GFCM/32/2008/1 Regional scheme on port state measures to combat illegal, unreported and unregulated fishing activities in the GFCM area
- GFCM/30/2006/5 Criteria for obtaining the status of cooperating non-contracting party in GFCM area

Panel analysis

As noted in Part 4.2.5 below, even though the above Recommendations have been adopted in line with the highest international standards as set out in international instruments and decisions of other RFMOs, it is difficult, if not impossible, to assess their effectiveness because of the inability or unwillingness of most of the Members to provide – or in important cases such as a vessel register, to update - the required information. For example, in 2010 the failure by some Members to update data on licence renewal has resulted in about half of the vessels in the Authorized Vessel List being placed on a dormant list.

It is concluded that the MCS measures do not appear to be effectively implemented.

Strong MCS is built upon the fulfilment of information-related obligations, and these obligations have clearly and consistently not been met by GFCM Members. The success of any new MCS measures or schemes may be unattainable until the problems caused by failure to provide information under existing measures are solved.

Panel recommendations

27. GFCM should as a priority address and solve the problem of the weak and uneven implementation by Members of requirements under existing MCS measures. One mechanism could be to establish a task force to evaluate MCS in the GFCM Area of Competence and make recommendations for its strengthening.

28. As the implementation by Members of MCS measures improves, GFCM should consider a more

comprehensive MCS system to implement the longer-term components of the Control and Enforcement Scheme such as high seas inspection, port inspection, monitoring programmes and observer programmes.

4.3.4 Follow-up on infringements

The extent to which the GFCM, its Members and cooperating non-members follow up on infringements to conservation and management measures is difficult to assess, based on the failure of many, if not most, Members to provide information on the status of GFCM decisions as described in Part 4.3.5. Three MCS Recommendations adopted in 2009 noted above in Part 4.3.3 would most strongly enable Members to follow up on infringements; those relating to a GFCM Record of Vessels, a list of vessels presumed to be carrying out IUU fishing in the GFCM Area and a regional scheme to combat Port State Measures. In addition the Recommendation to require VMS does not enter into force until 2011, and information is not available to make an assessment on the basis of these Recommendations.

The Commission in principle cooperates with ICCAT in exchanging information on IUU Vessel Lists and maintaining consistency with the ICCAT Authorized Vessel Lists as described in Part 4.5.4, but the information itself is inadequate to assess any follow-up on infringements.

In addition, the e-Compendium of GFCM Decisions, described in Part 4.3.5, shows that only nine Recommendations on Conservation and Management have been adopted since 1997, with one other having been adopted in 1976. The nine Recommendations relate variously to establishment of fisheries restricted areas, fishing gear, closed season and certain fisheries (including demersal, small pelagic and deepwater species).

Panel analysis

The failure by many or most Members to provide information on the follow-up on infringements does not allow a proper Panel analysis, except to conclude that countries are unable or unwilling to comply with information requirements. This is shown by the fact that no Member has proposed the inclusion of vessels on the IUU Vessel List, nor has any Member notified its port State measures.

There are no detailed provisions on the follow-up to infringements in the GFCM Agreement, unlike the instruments of other RFMOs.

Panel recommendations

29. Mechanisms should be considered to ensure that Members and cooperating non-Members follow up on infringements to conservation and management measures, and submit information as required under relevant Recommendations.
30. GFCM should consider a sanction mechanism for non-compliance, and task the CoC to develop a structured procedure for cases of infringement.
31. Provisions for follow-up on infringements should be included in any amended/replaced GFCM Agreement.

4.3.5 Cooperative mechanisms to detect and deter non-compliance

At its 30th Session in 2006, the Commission had requested each Member to inform on actions taken to implement the decisions and recommendations of the Commission, both in national law and operational action. A major focus of the CoC is its annual consideration of the status of implementation of GFCM decisions by Members.

To encourage, harmonize and simplify such reporting, the Secretariat has provided a format for standardized reporting. In addition, the Secretariat has developed a Compendium of decisions over the past four years, which include both binding and non-binding decisions. For ease of use and to promote universal access to the relevant decisions the Compendium has recently been produced in electronic form as an e-Compendium. It is a stand alone application that includes a database of GFCM decisions that can be downloaded and installed on a user's computer. The software contains several functionalities: simple/advanced search, detailed report, single/multiple record(s) print out, PDF generation and export features. The e-Compendium is available for downloading on both CD and the GFCM website.²⁵

In addition, the Task 1 Regional Database and Information System, currently under development by the Secretariat, imports data files compliant with the established standards and business rules, and includes various data processing functions and outputs useful for both scientists and managers alike.

²⁵ <http://151.1.154.86/GfcmWebSite/e-Compendium/info.html>

Despite these exemplary efforts of the Secretariat, it is consistently reported at every Session of the CoC that a limited number of Members have fulfilled their duty to report, and that there are problems with timeliness. There are also many discrepancies in the information received. In addition to the need for submission of relevant data and information that indicate implementation of GFCM decisions, Members should also submit relevant legislation and regulations, but this is also not being fully received.

At its Fourth Session in 2010, the CoC noted that the examination of implementation of GFCM decisions by Members required a greater amount of time and pondered on the possibility of holding a longer Session, possibly at a different period of time.

Complementing the above efforts to secure compliance, the Thirty-fourth Session of GFCM adopted Recommendation GFCM/34/2010/3 Concerning the identification of non-compliance. It sets out a process that will identify annually Members that have not met their obligations under the GFCM Agreement in respect of the GFCM conservation and management measures as well as cooperating non-Members that have failed to discharge their obligations under international law to cooperate with GFCM.

Two relevant non-binding Resolutions adopted by GFCM that encourage reporting by Members are GFCM/32/2008/1 Reporting on the implementation of GFCM management measures, and GFCM/21/1995/2 Reporting on activities of fishing vessels operating in the Mediterranean

Panel analysis

In spite of the excellent state-of-the-art attention being devoted by the Secretariat to developing user-friendly information systems and mechanisms to assess, detect and deter non-compliance, the failure by many Members to cooperate in a full and timely manner is a major recurring problem.

At national level, and particularly for some developing Members, it has been acknowledged that technical and financial resources may not always be available in order to fully comply with certain decisions. In this respect, some Members have called upon regional projects and initiatives for additional support in technical capacity building. However, there does not appear to be a universal, GFCM-wide approach to identifying the major weaknesses in this respect, or of prioritizing them and then integrating them into subregional projects.

The issue of the routing of requests for information has been discussed in the CoC, and this could play an important role in ensuring timely responses. It is believed that the requests for the submission of

national reports on compliance as well as for required data should be channeled through the official diplomatic channels.

Procedures for the identification of non-compliance, contained in Recommendation GFCM/34/2010/3 should enhance the procedures of the CoC. However, the actions that could be considered when non-compliance is identified could be made clearer.

The CoC could be more productive if Members submitted all the required data and information, allowing the Committee to play an enhanced role in achieving the objectives of the Commission. When the situation improves, it would be worthwhile considering holding longer meetings of the CoC at a different time period than the annual Sessions.

In addition, there is uneven compliance with and enforcement of GFCM Recommendations and other decisions among GFCM Members. It would be useful to identify the reasons why this is so, and one mechanism could be to hold meetings at subregional level to identify the reasons and propose solutions for a general level of strengthening of compliance and enforcement.

Panel recommendations

- 32. The reasons for the failure of Members to provide required information and data should be identified and assessed, and solutions and priorities recommended, for consideration by the Commission. As appropriate, the technical and human weaknesses of some Members in this regard should also be identified and proposals made for addressing them through subregional or other projects.
- 33. The routing of requests by the Secretariat for information should ensure that they are accorded the highest priority and Members should review their response mechanisms at national level to ensure that full and timely responses are provided to such requests and routinely to comply with GFCM obligations.
- 34. The possible consequences of identification of non-compliance pursuant to Recommendation GFCM/34/2010/3 should be made clear.
- 35. Sub-regional meetings should be held to identify reasons why there is stronger compliance and enforcement of GFCM Recommendations and decisions by some Members and to propose solutions for strengthened compliance by other Members.

36. The timing and duration of Sessions of the CoC should be reviewed to ensure that there is adequate time to enable the Committee to fulfil its functions.

4.3.6 Market-related measures

The GFCM has not adopted market-related measures. Although marketing is a concern for aquaculture, the diverse characteristics of the Region and its fisheries would not at present make such a measure practicable. Consequently, there is no Panel analysis or recommendation.

4.4 Decision making and dispute settlement

4.4.1 Decision-making

The decision-making procedures of GFCM are in Article V of the Agreement and Rule IX of the Rules of Procedure. As noted in Part 3.2, they have a number of weaknesses. First, Article V permits Recommendations on management measures to be adopted by a two-thirds majority of the Commission “present and voting”. This falls short of two-thirds of the Commission Members and opens the door for opt-outs by Members that were not present and voting. There is an excessive, and outdated, opt-out period of six months before the measures can enter into force. As well, there are no provisions as there are in more modern RFMO Conventions that restrict the grounds for objection (for example if the content of a decision discriminates against a Member or is inconsistent with the Agreement) or require justification of the objection.

Second, decision-making by consensus is not permitted or encouraged; in fact the Rules of Procedure require voting to be by show of hands. This is a major gap in the GFCM Agreement and is not consistent with decision-making processes agreed, for example, in the UNFSA which encourage the conference of Parties to make “every effort to reach agreement on any amendments by way of consensus and there should be no voting on them until all efforts at consensus have been exhausted.” (Article 45(2)) Although consensus could form the basis for a range of decisions, it is not recommended for application to decision-making on conservation and management measures.

Third, the procedures are not transparent to the extent that they do not state the broad process, including reasons or subject areas, where sessions and voting may be carried out in sessions closed to all except heads of delegation and possibly the Secretariat. The Rules of Procedure do specify that voting on matters relating to individuals shall be by secret ballot. (Rule IX.4)

In addition to the gaps in the rules, there is also some concern about the *de facto modus operandi* decision-making in relation to Recommendations and the role of the Committees and Commission.

There is overall concern that the Commission does not devote enough time or energy to ensuring that a greater number of Recommendations are adopted that would have the effect of strengthening fisheries management and aquaculture activities through GFCM.

In fact, the time of the Commission Sessions is largely taken with the reports of the various Committees, projects and meetings. In this context it often happens that Recommendations developed in the SAC are formally tabled by a Member that has agreed to be the conduit to the GFCM Session in respect of that proposed Recommendation. The Recommendations are often adopted with little or no discussion, possibly due in part to time constraints, or the relevant preparatory work. This process is inconsistent with the mandate of the SAC to provide scientific advice, and the mandate of the Commission to take decisions on management.

In practical terms, the decision-making in Sessions could benefit from consideration of the management aspects of proposed Recommendations. A fuller discussion, understanding and acceptance in the decision-making process may also promote more effective implementation.

Panel analysis

The decision-making provisions in the Agreement and Rules of Procedure are weak, outdated and inconsistent with the UNFSA and other modern instruments establishing RFMOs, particularly in relation to the adoption of Recommendations, the failure to provide for consensus decision-making and the need to clearly designate processes to ensure transparency.

The available time for consideration and decision-making in Commission Sessions in relation to Recommendations appears to be inadequate, particularly for identifying where new Recommendations are needed and for examining and deciding on the management aspects of proposed Recommendations.

Panel recommendations

37. Decision-making processes in relation to Recommendations should be reviewed and amended with the aim of making them more rigorous to reflect modern practices, including providing a shorter period of time before entry into force, defining the grounds on which objections may be made and requiring justification for the objections.

38. Decision-making processes should be reviewed and amended to reflect modern law and best practices on consensus and transparency.

39. The *modus operandi* of decision-making in relation to proposed Recommendations in Commission Sessions should be reviewed to ensure that the Committees and the Commission discharge their respective decision-making mandates, or in the alternative are given mandates to fit the current *modus operandi*, and to ensure that adequate time is allowed for identifying priorities for new Recommendations and examining and deciding on the management aspects of proposed Recommendations.
40. For the fisheries sector, one option to address the institutional aspects of the previous Recommendation above could be to create a Fisheries Management Committee, including scientists from the SAC, decision makers from the public and the private sectors and NGOs to review the work and to consider the proposals made by the SAC and transmit its recommendations to the Commission.

4.4.2 Dispute settlement

The requirements for dispute settlement are set out in Article. XVII of the Agreement. First, the Commission must try to settle the issue. Second, if that is not successful, a committee will be established composed of one member of each party to the dispute and an independent chairperson, but the Committee can only make non-binding recommendations. Third, the dispute can be referred to the International Court of Justice (ICJ) or arbitration unless the parties agree on another method of settlement.

Panel analysis

The Agreement does not provide for the compulsory dispute settlement procedures as required in the UNFSA or in the Conventions of many modern RFMOs. This represents is a major gap, considering that the UNFSA places an obligation on RFMOs to either introduce compulsory and binding dispute settlement procedures or to agree to apply, as between Contracting Parties, the dispute settlement procedures in Part VIII of its text.

Panel recommendation

41. The dispute settlement provision in the Agreement should be amended to reflect the requirements of the UNFSA.

4.5 International cooperation

4.5.1 Transparency

The UNFSA in Article 12 requires States to provide for transparency in the decision-making process and other activities of RFMOs, and also requires representatives from IGOs and NGOs to be afforded the opportunity to take part in RFMO meetings as observers or otherwise.

As noted in Part 3.2, there are some serious gaps in the GFCM Agreement and Rules of Procedure in this regard. There are no provisions in the Agreement, and Rule XII falls short of setting out a framework applicable to all observers. It restricts observers to Members or Associate Members of FAO and other States, as well as international organizations. No provision is made for observers from IGOs (including regional organizations), NGOs or other civil society organizations. The Commission has the power to specify which of its meetings may be attended by international organizations, which must first qualify as observers by having special competence in the field of activity of the Commission.

The practice of the Commission varies from these narrow Rules in favour of greater transparency. Both IGOs and NGOs have attended GFCM Sessions over recent years. In fact, the number of observers since 2000 has varied between six and twelve, and their attendance has been regarded as constructive. Observers also attend Sessions of the SAC and the CAQ, but there are not usually more than four observers at such Sessions.

The contribution of observers in committees, subcommittees and WGs, including NGOs with environment-related mandates and those representing producers and syndicates, are increasingly becoming more important to the work of GFCM. In particular, in 2010 at the Thirty-fourth Session the Commission stated that the work of the SAC still needs to be expanded in terms of both stakeholder participation and geographical coverage. Observers also attend the plenary sessions, but with a more limited role.

In other arenas, GFCM maintains a good level of transparency through public availability of a wide range of documentation on its website prior to and after meetings, as well as publications and technical

papers. Some concerns have included the wish by some Members to have documents translated into all the working languages, acknowledging however that this may not always be affordable.

The GFCM website itself is comprehensive, and information relating to meetings, Recommendations and other decisions of GFCM is comprehensive and easily found. The Compendium of GFCM decisions is a valuable information tool and can easily be downloaded. There is a well organized list of partner organizations, networks etc. with which GFCM work is carried out. The Contact webpage shows the composition of the Secretariat and the positions covered.

As noted in Part 4.3, the Secretariat has done excellent work in developing a wide range of state-of-the-art electronic information that supports fisheries management and compliance in a transparent manner. It has developed new tools, both for fisheries (for example, data collection, analysis and dissemination) and including for aquaculture with the complete modernization of SIPAM, which is becoming more user friendly and brings recognised added value to the data sent by its Members.

Some small changes could be made to the GFCM website to improve access to some institutional information on GFCM itself. For example, unlike the SAC webpage, there is no direct access to the CAQ *ad hoc* Working Groups through the CAQ page. It is necessary to look through the CAQ meeting documents to find information such as establishment and terms of reference. Although information on meetings is posted, it could be better organized to show all meetings at once, rather than the upcoming meetings only or those in the recent past (e.g. the earliest Session of the CoC shown is the Third Session in 2009).

Panel analysis

The absence of provisions relating to observers is a major gap in the GFCM Agreement, and the Rules of Procedure in this regard are very limited and outdated. This does not provide a clear or firm legal basis for transparency and must be corrected.

In addition, Rules should be adopted governing procedures for observers to attend meetings through, for example, prior notification, in line with the best practices of other modern RFMOs.

However, GFCM has highly satisfactory transparent *de facto* procedures in relation to observers, information and GFCM operations, and is increasingly becoming a strong platform for open activities and discussions on scientific, technical, economic, social and other aspects of fisheries and aquaculture management in the Mediterranean.

Panel recommendations

42. The Agreement and Rules of Procedure should be amended to include modern provisions on observers, in line with the UNFSA and other modern RFMOs.
43. The transparency of the GFCM through its website, although of a very high standard, should be slightly improved to ensure that certain information, particularly relating to institutional aspects, can more easily be found.
44. Although the number of observers attending the plenary sessions seems sufficient for generating discussions with other stakeholders, the Committees, which have a lower attendance rate by observers, should consider endeavouring to reinforce their relationship with observers so their knowledge and viewpoints may be considered.

4.5.2 Relationship to cooperating non-members

The UNFSA encourages coastal States in the region of an RFMO to become members of the RFMO or agree to apply its conservation and management measures (Article 8 (3) and (4)) and requires non-members not to authorize their vessels to fish where there are such measures, and the Conventions of modern RFMOs refer to cooperating non-members. However, there is no relevant provision in the GFCM Agreement.

Recommendation GFCM/30/2006/5 Criteria for obtaining the status of cooperation non-contracting party in the GFCM area was adopted in 2006. The CoC is responsible for considering designation of cooperating non-parties, but has not addressed this issue since its establishment. In general, there are currently no foreign vessels to which this Recommendation would apply and of the three non-member countries bordering the Black Sea which are FAO, but not GFCM Members (Russia, Ukraine and Georgia), two have occasionally attended meetings as observers.

Interestingly, although there are no cooperating non-contracting parties, a number of GFCM Recommendations refer to them as follows:

- GFCM/33/2009/1 On the establishment of a Fisheries Restricted Area in the Gulf of Lions;
- GFCM/33/2009/2 On a minimum mesh size in the codend of demersal trawlnets;
- GFCM/33/2009/3 On the implementation of the GFCM Task 1 Statistical Matrix;

- (GFCM/33/2009/7) Concerning minimum standards for the establishment of a VMS in the GFCM area;
- GFCM/33/2009/8 On the establishment of a list of vessels presumed to have carried out IUU fishing in the GFCM area;
- GFCM/33/2009/9 Recommendations from ICCAT of relevance for the Mediterranean.

Panel analysis

Including reference to cooperating non-members in GFCM resolution reflects a positive approach that could be applicable to future circumstances.

Initiation of efforts to mutually review relations with the three Black Sea States with a view to their becoming cooperating non-contracting parties, if not Members of GFCM, would be useful with a view to improving the management of common stocks (especially small pelagics) and progressively involving them in GFCM activities. In 2008 there was a proposal for a GFCM Black Sea project, but this has since been initiated as a FAO project. It could be useful to explore the possibility of presenting and discussing relevant outcomes in the GFCM Session and/or the SAC meetings, together with experts from the three States.

Panel recommendations

45. The GFCM Agreement, as part of a broader review or revision, should reflect international standards on cooperation with non-members.
46. GFCM Recommendations should continue to refer to cooperating non-members, even in the absence of such States.
47. Efforts should be made to mutually identify the benefits of according cooperating non-member status or Member status to the three non-member Black Sea States, both to GFCM and to those States.

4.5.3 Relationship to non-cooperating non-members

A non-cooperating non-member typically is not involved in any GFCM meetings and disregards GFCM conservation and management measures, including provision of information on fishing or related activities. As noted above in Part 4.3, GFCM has taken a number of measures to deter activities

of non-cooperating non-members, including establishment of an IUU Vessel List and Authorized Vessel List, and is making information publicly available as well as exchanging it with ICCAT.

These actions are consistent with the UNFSA, which requires Members to exchange information relating to the fishing operations by such non-members and take actions to deter their activities (Article 17(4)). In addition, Rule X of the Amended Rules of Procedure, requires the CoC to monitor, review and analyze information pertaining to the activities of Non-Contracting Parties and their vessels which undermine the objectives of the Agreement including IUU fishing and recommend actions to be taken by the Commission to discourage such activities.

Recommendation GFCM/33/2009/6 Concerning the establishment of a GFCM record of vessels over 15 metres authorized to operate in the GFCM area requires the Contracting Parties to take measures and notify the Executive Secretary of any factual information showing that there are reasonable grounds for suspecting vessels. The Commission and the Members are to communicate with each other and make the best effort with FAO and other RFMOs to develop and implement appropriate measures.

Panel analysis

GFCM has adopted strong measures requiring a number of strict actions to be taken to deter IUU fishing activities of the vessels of non-cooperating non-members.

Unfortunately it appears that there has not been effective implementation, as discussed in Part 4.3, due to the inability or unwillingness of Members to provide the requisite information. Some consequences are that no vessel is yet on the GFCM IUU Vessel List and the Authorized Vessel List is not up to date.

Panel recommendation

48. GFCM Members should implement Recommendations that deter activities by non-cooperating non-members, including implementing the recommendations of this Panel made in relation to compliance and enforcement.

4.5.4 Cooperation with other RFMOs

The principal RFMO with which GFCM cooperates is ICCAT, as described in Part 2.1. Cooperation within the JWG, which was reviewed in 2008, is ongoing. However, it is generally believed that such cooperation continues to need strengthening, particularly on scientific and technical bases. Priorities

are set for the JWG on an *ad hoc* basis for each of its Sessions, and this has recently resulted in studies and prioritization of small pelagic species in 2008 and 2009. However, there are exceedingly low landings of small pelagics so it should not be an ongoing priority for GFCM.

There is no regular and significant exchange between the two organizations of data and mutual concerns on large pelagic species outside the JWG, so the relationship does not appear to be as close as it might be. Meaningful strengthening of the JWG, including by identifying ongoing mechanisms of ongoing cooperation on species of common concern to each organization, could improve the relationship and advance scientific understanding of species of common concern.

ICCAT generates significant work on large pelagics, including bluefin tuna and swordfish. Given the current state of these species in the Region it may be wise, in considering the strengthening of the JWG, to identify them as a priorities for ongoing scientific and technical cooperation of the two bodies.

As noted in Part 2.1.5, ICCAT recommendations are automatically endorsed by GFCM at its Annual Sessions. Although harmonization of measures and information exchange among RFMOs is encouraged by international instruments and is a laudable objective, automatic adoption without consideration of relevance to, or of the special circumstances of GFCM may not serve the best interests of the Commission.

The importance of creating mechanisms where relevant vessels on the ICCAT IUU Vessel List would also appear on the corresponding GFCM list has been acknowledged, and ICCAT Recommendation 07/09 requires ICCAT to include any IUU vessel identified by GFCM to be included on the ICCAT list unless there is an objection.

Regarding cooperation on authorized vessel lists, Recommendation GFCM/33/2009/6 concerning the establishment of a GFCM record of vessels over 15 metres authorized to operate in the GFCM Area requires the flag States of the vessels on the authorized vessel record to keep consistency between the GFCM record and ICCAT record of vessels (paragraph 5 (g)).

There has been sporadic cooperation with other RFMOs in the past. A WG on Sturgeon, in cooperation with the EIFAC, was operational from 2001 to 2005 when GFCM withdrew for the time being due to limited results and other priorities. In 2004 the Commission encouraged close cooperation between the SAC and the Advisory Group on Fisheries and other Marine Living Resources of the Black Sea Commission.

GFCM cooperates with other RFMOs broadly by regularly attending meetings of and otherwise contributing to the Regional Fishery Bodies Secretariats Network (RSN).

Panel analysis

Cooperation between GFCM and ICCAT is longstanding and enduring through reciprocal attendance at meetings and other mutual activities, but specific scientific and technical cooperation is in need of prioritization and strengthening. It would be enhanced by mechanisms encouraging GFCM scientists to follow ICCAT work more closely and promoting regular exchange of information on major species of common interest, particularly bluefin and swordfish in view of relevant ICCAT recommendations adopted by GFCM in 2010 (ICCAT recommendation [09–04] for a management framework for the sustainable exploitation of Mediterranean swordfish and replacing ICCAT recommendation [08-03] and ICCAT recommendation [09–06] amending recommendation [08-05] to establish a multi-annual recovery plan for bluefin tuna in the Eastern Atlantic and the Mediterranean).

Cooperation with other RFMOs has occurred on an *ad hoc* basis, but the Secretariat has limited resources to devote to meetings outside the many GFCM meetings held every year. However, potential forms of cooperation that may enhance the work of GFCM should be explored. For example there may be areas of mutual interest between EIFAC and GFCM on coastal aquaculture, mindful that EIFAC Members recently agreed on the reform, restructuring and strengthening including a change of designation to the EIFAC.

Panel recommendations

49. GFCM and ICCAT should follow up the recommendations on cooperation between the organizations in the 2008 ICCAT Performance Review ensure broader and closer scientific and technical cooperation, particularly with respect to Bluefin tuna and swordfish in the Mediterranean and Black Sea and of strengthening mechanisms to ensure a continuous and timely exchange of data and information and closer working relations between GFCM and ICCAT scientists.
50. The Commission should review the advantages and disadvantages of automatically adopting ICCAT Recommendations, with a view to maximizing the use of time in its Annual Sessions and to ensuring harmonization of recommendations that are relevant to GFCM.
51. The Commission should explore potential mechanisms of cooperation with other RFBs, including EIFAC in respect of aquaculture in coastal areas.

52. The Commission should continue its cooperation with other international or intergovernmental organisations covering the same geographic area and operating on the same subjects as GFCM, and consider whether and how such cooperation should be expanded or strengthened.

4.5.5 Special requirements of developing States

The GFCM Agreement does not provide for the special requirements of developing States. However, the Commission addresses the issue in other ways.

As noted in Part 4.6 below, the components of the autonomous budget are fixed basic fees for Commission membership, the total round weight of catch/production and a wealth component: according to per caput Gross Domestic Product (GDP). This last part of the contribution is determined by a formula which considers the economic capabilities of each Member and divides members into four groups. Members with the lowest GDP are not required to contribute to the wealth component.

Special assistance is also given through mechanisms such as the regional projects described in Part 2.1.3, the MoU with CIHEAM which has permitted the development of a training programme for fisheries and aquaculture experts with a special attention to the needs of the developing countries in terms of capacity building and through FAO Regular Budget funds and extensive assistance from some developed Members, notably the EU, Italy and Spain.

Some outcomes of the support include the systems of statistical data for both fisheries and aquaculture, GFCM publications, the participation of developing coastal States in scientific meetings and the delivery of training programs.

There are also other forms of support to developing Members. For example, when GFCM Members adopt Recommendations, they agree on timelines taking into account the human and financial capacity of developing Members to implement their terms earlier (for example by agreeing to delay the required implementation of a Recommendation on vessel monitoring systems). In addition, the subregional projects not only provide assistance to developing Members but serve to strengthen relations between developed and developing GFCM Members.

Panel analysis

In general, there is satisfactory recognition of the needs of, and of assistance to, developing GFCM Members. However, the effectiveness of the subregional projects in terms of linkages with GFCM priorities and processes could be improved.

The subregional projects provide assistance to developing Members. The original intent of establishing these projects was to address directly the needs of GFCM. Over time, however, the needs of GFCM have changed at a faster pace than the objectives of the subregional projects.

Presentation of the reports of the work and outcomes of the projects in GFCM Sessions is comprehensive. Although this contributes to broader understanding and appreciation of the work that has been done, the valuable time of the Sessions used in considering the outcomes would be better invested if there were criteria for designing subregional projects which required closer ties to the work of GFCM and could result to a greater extent in the development of Recommendations by the Commission. It is observed that the time of the Sessions could be better invested by putting a greater emphasis on developing Recommendations, including through the work of subregional projects as appropriate.

A continuing problem experienced by GFCM is the inability of a number of its developing Members to provide required information or statistics, for example to SIPAM or on port State measures, due to insufficient human or financial capacity. The failure of many Members to provide information to the Secretariat, including for reasons of inadequate capacity, is a continuing problem for the Secretariat and was extensively addressed at the Thirty-fourth Session of GFCM in 2010.

Panel recommendations

- 53. The subregional projects should review their project development criteria to ensure stronger links with GFCM and to contribute to a greater extent to the development and implementation of Recommendations by the Commission.
- 54. Efforts by the Commission to develop the capacity of Members to provide the information to and implement Recommendations of the Commission should continue and be strengthened as appropriate.
- 55. Efforts in assistance to developing States should be further strengthened, with the expanded participation of donors as appropriate, including an extension of the MedFisis project.

4.6 Financial and administrative issues

As noted in Part 3.1.1, the GFCM Agreement was amended in 1997 in order to provide for an autonomous budget. The amendments entered into force in 2004, and apply only to those Members that have accepted them as shown in Figure 2. Currently 22 Members have deposited their instruments of acceptance while Egypt and Israel have not yet done so. However, Egypt is contributing to the autonomous budget.

The GFCM operates on the basis of an autonomous budget, approved at each Session and, at the same time, it retains administrative links to the FAO, which has some responsibilities associated with the operation of the Commission. The Secretary and all the staff are FAO employees and the FAO financial regulations, staff rules, and procurement procedures apply to GFCM.

The 2010 autonomous budget is US\$1 624 000 with the components shown in Figure 9.

Figure 9
Components of GFCM autonomous budget, 2010

Component	% of total budget	Amount (US\$)	Explanation
Basic fee	10%	162 400	US\$7 000 for each Member
GDP Component	35%	568 400	Four levels, from 0 to US\$86 779
Catch Component	55%	893 200	EU pays catch component for all its Member States, about US\$500 000

The EU contributes the largest amount, a total of about US\$520 000 in 2010, followed by Turkey, Japan, France and Italy. The components of the autonomous budget are generally consistent with that of other RFMOs.

The preparation of the budget is based on the proposed programme of work of the SAC, the CAQ, the CoC and the CAF as adopted at their respective Sessions as well as specific activities carried out by the Secretariat. The budget of cooperative projects financed from extrabudgetary resources and executed by the Secretariat is dealt with separately from the GFCM global budget.

The autonomous budget for 2010 is generally apportioned as follows:

- 60% permanent staff;
- 35% implementation of activities, including travel;
- 5% servicing and miscellaneous.

These proportions are more or less consistent with expenditures for administration and operating costs elsewhere, including a FAO sister organization, the IOTC.

This 2010 GFCM budget seems to meet a similar level of funding and staffing as some other RFMOs, shown in Figure 10. There is a significant variation in the number of meetings under each of these bodies, with GFCM holding the most meetings. In 2010, only six of the 29 GFCM meetings were held in Rome. Between June 2010 and March 2011, a further 29 GFCM meetings were scheduled, only two of which were to take place in Rome.

Figure 10
Level of budget, staffing, number of meetings and members for select RFMOs

RFMO	Budget 2010 US\$ millions	Permanent Staff 2010	Number of Meetings 2010	Number of Members 2010
GFCM	1.6	8	29	24
ICCAT	(2.7 million euros)	26	18	48
IOTC	1.9	11	12	28
NAFO	1.7	9	11	12

Contributions are generally paid on time, but arrears and their use is still a problem. In 2009, most Members had settled their contribution by December, six months after the call was made by the Secretariat in June. In total, eighteen Members had deposited their instruments of acceptance and remitted their contributions, and at the Thirty-fourth Session in April 2010 the contributions of three others were announced as made or pending.

In addition to the autonomous budget, extrabudgetary contributions are received from Members. Current donors and activities are shown below, together with budgetary information available on the GFCM website. Regarding the latter, it was sometimes difficult to establish how many years each of the projects had been operative, and the expenditure for a given year.

- Tunisia for the cooperative project in support of the SIPAM Regional Centre. The total amount of the SIPAM project since 1993 was US\$2 826.00. This was closed in 2010.
- Spain for the cooperative project in support of the WG on marketing of the CAQ (MedAquaMarket). At the end of 2009, the project had a positive balance of US\$14 983.
- EU for the cooperative projects on InDAM and on SHoCMed in support of the WGs of the CAQ. For InDAM, US\$93 734 was allocated. The SHoCMed budget was US\$53 268 and discussions are under way with donors for a possible second project year for the latter. The

national research institutions of the Member Countries are asked to contribute to the activities of the two projects by facilitating the involvement of their national experts in related activities.

- Italy for the cooperative project for strengthening cooperation on fisheries and aquaculture in the Mediterranean and Black Sea. This project has two components: fisheries legislation and regulation and the management of lagoons and interactions between aquaculture and capture fisheries. 300 000 euros were allocated.

Contributions by Members are deposited in FAO accounts, and FAO maintains the accounting of the Commission. Project support costs are charged by FAO at the rate of 4.5%, assessed over the expenditures. The extrabudgetary resources are managed by the Secretariat through trust funds, independently of the autonomous budget of the Commission.

Administrative and financial issues are addressed in the recently established CAF, described in Part 2.1.3.4. At its first Session in 2010, the CAF considered a report from the Secretariat on, *inter alia*, administrative and financial issues, procedures for the selection of the GFCM Executive Secretary, proposed amendments to the GFCM Rules of Procedure to reflect the TORs for CAF and the provisional GFCM budget and Member contributions for 2010-2011.

A number of issues were raised in the first Session including the use of arrears, the costs of additional staff and the importance of reflecting priorities in the work plan. After in-depth discussion, the CAF agreed that a small informal group would work on a budget proposal and serve to facilitate the understanding of decisions on budget related issues, while taking into consideration the workplan priorities of the SAC and the CAQ.

In relation to the urgent need to strengthen the Secretariat in terms of technical staff, a proposal for three additional posts within the course of the next two years, at a cost of US\$293 280, was brought to the attention of the CAF at its First Session in 2010. The posts were:

- Stock assessment/population dynamics expert;
- Editor/translator of technical documents and publications;
- Manager of information on compliance and aquaculture.

There was debate on the extra cost and it was proposed that the strengthening of human resources of the Secretariat should be considered and carried out only after the election and appointment of the new Executive Secretary and in consideration of the outcome of the Performance Review.

The autonomous budget provides for eight positions in the Secretariat: the Executive Secretary, Deputy Executive Secretary, Aquaculture Expert, Biostatistician, Data Manager, Programmer/Systems Analyst, Bilingual Secretary and Administrative Assistant. As at September 2010, there were also also four volunteers (two for aquaculture and two for fisheries), one intern (statistics/fisheries), two consultants (data management and fisheries regulations) and one visiting expert (aquaculture). Their main duties are shown in Figure 11.

Figure 11
GFCM Personnel
September 2010

Position	Term	Main functions	Fisheries	Aquaculture	Statistics/ Database/Info /IT
Executive Secretary D-1	3 years	Implementation of the policies and activities of the Commission; overall responsibility for planning, coordination and administration of the Secretariat in accordance with the decisions of the Commission	√	√	√
Deputy Executive Secretary/Adviser fisheries management P-5	3 years	Provide support to the activities of the executive secretary in implementing the policies and activities of the Commission more specifically provide technical support to SAC, CAF and CoC	√	√	√
Aquaculture Adviser P-4	3 years	Provide support to the activities of the executive secretary in implementing the policies and activities of the CAQ		√	√
Bio-Statistician P-3	3 years	provide support to the Deputy Executive Secretary in statistical and biological data collection process and technical support to the Sub-Committee on Statistics and Information of SAC;	√	√	√
Management fisheries Information Officer P-2	3 years	provide support to the Deputy Executive Secretary in fishery data processing, data management and data quality control	√		√
Office Clerk G-5	1 year	Clerical duties, secretarial and administrative services	√	√	
System Support Assistance	3 years	Technical support in Systems planning, designing, development and maintenance activities	√	√	√
Office Clerk G-3	3 years	Clerical, secretarial and administrative services	√	√	
Visiting expert	11 months	Support the project "Strengthening cooperation on fisheries and aquaculture management in the Mediterranean and the Black Sea, component 2: Mediterranean coastal lagoons management: interactions between aquaculture and capture fisheries		√	
Consultant	11 months	Assist in database and information system management and contribute to data quality control and data processing; involve in the management and maintenance of the GFCM website	√	√	√
Consultant	11 months	Support the project "Strengthening cooperation on fisheries and aquaculture management in	√		

Position	Term	Main functions	Fisheries	Aquaculture	Statistics/ Database/Info /IT
		the Mediterranean and the Black Sea, component 2: fisheries regulations			
Intern	3 months	Capture fisheries production reporting scheme; development of a database application for FAO Area 37 and SIPAM.	√	√	√
Volunteer	6 months	Update the annotated bibliography collected within SHoCMed on interaction between Mediterranean aquaculture and environment		√	
Volunteer	6 months	Scientific research duties relating to red corals, activities of RAC/SPA and five priority species	√		
Volunteer	6 months	Scientific research duties relating to elasmobranches	√		
Volunteer	6 months	Support to specific activities related to the CAQ activities		√	

It is clear that the increase in activities of the Commission and its subsidiary bodies (SAC, CAQ, CoC and CAF) in recent years has significantly added to the workload of the Secretariat, which was already very heavy. It was reported to the First Session of the CAF that the Secretariat had coordinated, and actively contributed to, the preparation and delivery of 20 meetings, including 11 meetings of subsidiary bodies, the annual session of the SAC, seven meetings of the CAQ subsidiary bodies including the CMWG. All the meetings agreed by the Commission had been convened and the Secretariat also participated in a number of meetings of partner organizations or entities and FAO sub-regional projects. Because of time and budgetary constraints, the Secretariat was again obliged to decline invitations to several other meetings directly relevant to the work of the Commission.

At the First Session of the CAF, the EU delegate, supported by the EU Member States and some other delegations, addressed the strengthening of human resources of the Secretariat and pointed out that a clear definition of the role of the Secretariat was needed and the increase of staff should focus more on the administrative issues rather than specific technical topics. At that meeting, some delegates mentioned that many of the activities requested of the Secretariat could be carried out by consultants and that this should be reflected in the revised version of the budget.

There are difficulties arising from the location of the Secretariat in the FAO headquarters, including lack of proximity among staff offices, and there is a perception among Members that this could weaken the functional autonomy of the Secretariat. Arrangements by the Government of Italy to host the GFCM Headquarters have undergone delays for many years. It was reported by the Italian delegate at the GFCM Thirty-fourth Session that constraints were only related to internal administrative issues that were being solved. Otherwise the costs of such a move have been addressed and any concerns about the functional autonomy of the Secretariat should be allayed upon the move. To underscore the functional autonomy, consideration could be given to changing the email addresses of staff from name@fao.org to name@gfcm.org.

Panel analysis

In general, GFCM is functioning well within the FAO Financial Regulations in respect of the autonomous budget and extrabudgetary support, including for the receipt and disbursement of contributions to the autonomous budget and the management of extrabudgetary funds. Sufficient financial and other resources, such as the support by national institutes, are made available to achieve the objectives of GFCM and to implement its decisions. The Executive Secretary is in a position to control all the budget components and the financial resources are efficiently and effectively managed.

The auditing of the financial management has not yet been undertaken internally by FAO, but it has been agreed that an external financial audit will take place in future. Considering that the autonomous

budget entered into force in 2004, it would be timely to arrange for such an audit should in the next two years.

Regarding the management of human resources, Figure 10 shows that GFCM had the highest number of meetings in 2010, and the lowest number of staff of the four RFMOs shown. Some delegations noted at the First Session of the CAF that the request of three additional personnel (two of which would have information-related duties) was motivated by the amount of additional activities requested to the Secretariat to perform the activities and the workplan made by the Subsidiary Bodies of the Commission. The EU delegate, supported by the EU Member States and some other delegations, proposed that the strengthening of human resources of the Secretariat should be considered and carried out only after the election and appointment of the new Executive Secretary and in consideration of the outcome of the Performance Review.

Although the Secretariat is discharging its current duties in a satisfactory manner, it is clear that personnel are under a great deal of pressure and are stretched thinly. This is particularly evident when the ratio of budget to staff to meetings is compared with other RFMOs, as indicated in Figure 10. Furthermore, the vast number and in-depth nature of law-and-governance related tasks assigned to a junior consultant over 11 months, although important, seems to be an unrealistically heavy workload. The proposed outcomes are expected to be of value for the Commission, but this is one area that is indicative of both the pressing need for human resources on the one hand and the scarce financial resources on the other.

A full professional institutional review and assessment of existing GFCM human resources, together with possible options for meeting evolving needs and serving the Commission's increasing activities, would be highly useful upon the election of a new Executive Secretary. Such an assessment would need to take into account FAO rules regarding staff recruitment and employment, and should involve a review of the objectives and programmes of GFCM, needs identified by the Commission, the organization and duties of personnel, the means of assuring optimum productivity and options for recruiting personnel such as permanent staff, FAO programmes (e.g. visiting experts, junior professionals, interns, volunteers). Financial sources available should also be considered, such as extrabudgetary project funding or a fee system in respect of specific projects. The assessment could also review the effectiveness of support by the Members to the work of national scientists, experts, administrators and focal points.

A disproportionately large number of meetings are held during the year, compared to other RFMOs, and only 20% of the meetings are held at FAO headquarters in Rome, Italy. Opinion seems to be divided on the merits of holding meetings according to principles of cost-effectiveness, to benefit the

host country or for purposes of raising the GFCM profile within a given Member. In this regard, it should be noted that the statutory meetings require the extra expense of travel for interpreters and the new GFCM Headquarters has only limited space for meetings. In addition, intense travel schedules can negatively affect staff productivity.

In view of these factors, the Commission may wish to consider the overall costs and benefits of holding meetings in Rome or in Member countries. As appropriate, it could designate what types of meetings should be held in Rome and limit the budgetary implications to GFCM of holding meetings outside Rome, for example by agreeing on expenses to be paid by the host country such as travel costs, administration, meeting costs, interpretation and others as appropriate.

The establishment of the CAF in 2009 is considered an important step to strengthen transparency and involvement of the Members in the financial management of the Commission, and the willingness to examine certain issues informally to facilitate broader consideration is a positive step forward.

Panel recommendations

56. A full institutional review and assessment of existing GFCM human resources, their organization, duties and general focus (on administrative or technical tasks), together with recommendations for meeting evolving needs, should be undertaken. It should take into account FAO rules regarding staff recruitment and employment and should involve a review of the objectives and programmes of GFCM, priority needs identified by the Commission, the means of assuring optimum productivity and options for recruiting personnel such as permanent staff, FAO programmes (e.g. visiting experts, junior professionals, interns, volunteers). It should further consider the effectiveness of support by the Members to the work of GFCM through national scientists, experts, administrators and focal points, consider financial sources available and recommend related actions and measures to strengthen the Secretariat. The review may be carried out by a task force led by the CAF.

57. The Commission should consider the overall costs and benefits of holding meetings in Rome or in Member countries and as appropriate agree on the types of meetings to be held in Rome, categories of expenses to be borne by host countries and staff productivity in an effort to limit the budgetary and human resource implications to the Secretariat of holding meetings outside Rome,.

58. The Secretariat should be moved as soon as possible to the new GFCM headquarters in Rome, Italy to strengthen functional autonomy, build esprit de corps and consider related changes such as amending the email address of staff to name@gfcm.org.

59. Members should ensure that their contributions to the autonomous budget are paid on time.
60. The current status of extrabudgetary contributions for specific GFCM projects should appear clearly on the relevant project website.
61. Funding mechanisms for extrabudgetary-supported activities should be explored, such as a fee system that applies to projects in which a Member may participate and derive some benefits.
62. The agreed external financial audit should be implemented within the next two years.
- 63.

5. COMPENDIUM OF THE PERFORMANCE REVIEW PANEL RECOMMENDATIONS

THE GFCM AGREEMENT

1. The Agreement is weak and outdated and there are many fundamental areas that need improvement. The weaknesses and gaps identified are, or have a potential to be, major impediments to the effective and efficient functioning of the Commission and its ability to effect long-term sustainability of fisheries and sustainable development of aquaculture in the Region.
2. The GFCM Agreement should be reviewed and either amended or replaced by a new instrument. A decision on whether to amend the Agreement or replace it should be made taking into account the full range of deficiencies identified by the Panel.
3. The GFCM Rules of Procedure should be reviewed and amended taking into account current FAO rules and practice, “best practice” standards of other RFMOs, the inconsistencies with the Agreement as well as the inconsistencies within the Rules of Procedure, gaps and the failure to address certain areas of importance.

CONSERVATION AND MANAGEMENT

Status of living marine resources

4. Most of the assessments units used by the SAC to provide management advice are based on GSAs. It is generally not known if these assessment units actually correspond to meaningful biological units. Results from stock assessments that are not based on meaningful biological units may be misleading. The SAC should give high priority to the identification of meaningful biological units.
5. Until meaningful biological units have been identified, the SAC should refrain from conducting assessments on parts of biological units or on entities that correspond to more than one biological unit.
6. The identification of meaningful biological units may indicate that coordinated management may be necessary in more cases than previously believed. Once meaningful biological units have been defined, the SAC should define reference points to prevent recruitment overfishing. Meaningful biological units may include more than one species.
7. Until meaningful biological units have been defined, the SAC should provide advice, on a multispecies basis, to make improvements under the four components of sustainability: improve the state of exploitation the resource, improve the economic benefits derived from fishing, improve the social benefits derived from fishing and improve governance.

Data collection and sharing

8. Data collected during standardised trawl and acoustic surveys should be made available in a format that allows independent analysis and should be analysed to identify meaningful biological units.
9. Consideration should be given to extending the MedFisis project in order to fully meet its original objectives.

Quality and provision of scientific advice

10. The reliability of the SAC assessments should be independently evaluated by comparing successive assessments, evaluating the data and methodologies of individual assessments and

taking into account the known or inferred biological unit to which the assessment refers.

11. The Panel endorses and re-iterates the recommendations of previous reviews of the SAC that the characteristics of the GFCM Region are such that a relatively heavy scientific structure with numerous subcommittees, WGs, expert groups or other subsidiary bodies may not be appropriate. Although the SAC has recognised this and has attempted to adjust its present structure and *modus operandi* to the reality of the Region, it remains a relatively heavy structure. Fewer subcommittees but more focussed *ad hoc* WGs with targeted participants could encourage and foster more the multidisciplinary and multispecies approaches where GFCM could achieve real progress.

Adoption of conservation and management measures

12. GFCM should consider requesting advice only for those resources that involve more than one of its Members and where it intends to take coordinated management action.

Capacity management

13. While several GFCM Members may have a genuine need to renew their fleets for economic and safety reasons, there is also a real danger that overcapacity will result with potentially severe consequences for the sustainability of the fishery resources. Based on the SAC assessments, there appears to be limited scope to increase fishing capacity. However, as noted, the resources in large portions of the GFCM area have not been evaluated. Great care should therefore be exercised in renewing fishing fleets.

Compatibility of management measures

No recommendations are made

Fishing allocations and opportunities

No recommendations are made.

AQUACULTURE

Status of aquaculture

No recommendations are made

Establishment and priorities of the CAQ

14. GFCM should review its overall work programme on aquaculture with an aim of updating and identifying priorities and making the programme more adequate to address recent needs including human and budgetary implications.
15. The CAQ should concentrate its activities on issues of strategic importance for regional aquaculture development. To this end it should consider recommending the development of an aquaculture policy, to be shared among all Mediterranean countries, where strategic issues are discussed and adequately addressed.
16. The CAQ should continue to strengthen its collaboration with other networks and organizations and focus its attention on the important priority issues already identified.

Functions and organization of the CAQ, the CMWG and the WGs

17. The function and organization of the CAQ, CMWG and WGs should be reviewed, taking into account considerations provided in this report, with a view to clarifying their functions, organization and procedures in order to ensure the most effective outcomes.
18. Participation in the CMWG should be open to all interested GFCM Members as a short term measure to allow fullest consideration of the CAQ-related issues on an annual basis until such time as the Commission may take a decision to change the frequency of the CAQ sessions.

Aquaculture information system: SIPAM

19. In order to maximise the synergies between the activities of the WGMA and SIPAM, the WGMA should identify the data requirements for aquaculture market analysis, and the SIPAM and the GFCM Secretariat should identify the sustainability and the cost effectiveness of its data collection.
20. Cooperation between SIPAM and other international institutions, including the Coordinating Working Party on Fishery Statistics and Eurostat, should be further strengthened.
21. Innovations and improvements to SIPAM should continue to be considered, such as the following:
 - introduce multilingual frame website and web facilities such as visible banners to permit a larger audience to available information;

- introduce an email alert in order to update the National Coordinators and aquaculture experts on the new information available and on the progress made by the other WGs on the different issues considered relevant for the Commission, as requested by the National Coordinators;
- make available the technical documents or reports on aquaculture that could be useful for the Members; this could also include available information on education and training on aquaculture in which the CHIEAM can play also a role;
- introduce “acquisition of information through questionnaires” to be compiled by the National Coordinators; this approach can help both the Secretariat and Coordinators in data storing, analysis and reporting; consequently the reports available in different formats could be a useful feedback service to the Nation Coordinators and Members.

22. Members should ensure that the National Coordinators are appointed in support of the SIPAM, and that they fulfil their duties in a full and timely manner.

Promotion of sustainable development and responsible management of aquaculture

23. Consideration should be given to supporting the promotion of sustainable development and responsible management of aquaculture through the strengthening of the role of the CMWG, which should include, on a continuing basis, provision of an overview for the WGs, including setting priorities and ensuring coordination and recommending the mechanisms for such promotion.

COMPLIANCE AND ENFORCEMENT

Flag State duties

24. An assessment of the implementation of the flag State duties in the Recommendations should be carried out, and recommendations made for effective implementation by Members of these flag State duties
- .
25. Flag States’ roles and duties should be included in any revision to or replacement of the GFCM Agreement, drawing on relevant provisions of the UNFSA, the IPOA-IUU and the FAO Port State Measures Agreement.

Port State measures

26. The CoC should establish the level of compliance by Members with the Recommendation on port State measures and as appropriate develop mechanisms and priorities to strengthen the compliance.

Monitoring, control and surveillance (MCS)

27. GFCM should as a priority address and solve the problem of the weak and uneven implementation by Members of requirements under existing MCS measures. One mechanism could be to establish a task force to evaluate MCS in the GFCM Area of Competence and make recommendations for its strengthening.

28. As the implementation by Members of MCS measures improves, GFCM should consider a more comprehensive MCS system to implement the longer-term components of the Control and Enforcement Scheme such as high seas inspection, port inspection, monitoring programmes and observer programmes.

Follow-up on infringements

29. Mechanisms should be considered to ensure that Members and cooperating non-Members follow up on infringements to conservation and management measures, and submit information as required under relevant Recommendations.

30. GFCM should consider a sanction mechanism for non-compliance, and task the CoC to develop a structured procedure for cases of infringement.

31. Provisions for follow-up on infringements should be included in any amended/replaced GFCM Agreement.

Cooperative mechanisms to detect and deter non-compliance

32. The reasons for the failure of Members to provide required information should be identified and assessed, and solutions and priorities recommended, for consideration by the Commission. As appropriate, the technical and human weaknesses of some Members in this regard should also be identified and proposals made for addressing them through subregional or other projects.

33. The routing of requests by the Secretariat for information should ensure that they are accorded the highest priority and Members should review their response mechanisms at national level to ensure that full and timely responses are provided to such requests and routinely to comply with

GFCM obligations.

34. The possible consequences of identification of non-compliance pursuant to Recommendation GFCM/34/2010/3 should be made clear.
35. Sub-regional meetings should be held to identify reasons why there is stronger compliance and enforcement of GFCM Recommendations and decisions by some Members and to propose solutions for strengthened compliance by other Members.
36. The timing and duration of CoC Sessions should be reviewed to ensure that there is adequate time to enable the Committee to fulfil its functions.

Market-related measures

No recommendations are made.

DECISION MAKING AND DISPUTE SETTLEMENT

Decision-making

37. Decision-making processes in relation to Recommendations should be reviewed and amended with the aim of making them more rigorous to reflect modern practices, including providing a shorter period of time before entry into force, defining the grounds on which objections may be made and requiring justification for the objections.
38. Decision-making processes should be reviewed and amended to reflect modern law and best practices on consensus and transparency.
39. The *modus operandi* of decision-making in relation to proposed Recommendations in Commission Sessions should be reviewed to ensure that the Committees and the Commission discharge their respective decision-making mandates, or in the alternative are given mandates to fit the current *modus operandi*, and to ensure that adequate time is allowed for identifying priorities for new Recommendations and examining and deciding on the management aspects of proposed Recommendations.
40. For the fisheries sector, one option to address the institutional aspects of the previous

Recommendation above could be to create a Fisheries Management Committee, including scientists from the SAC, decision makers from the public and the private sectors and NGOs to review the work and to consider the proposals made by the SAC and transmit its recommendations to the Commission.

Dispute settlement

41. The dispute settlement provision in the Agreement should be amended to reflect the requirements of the UNFSA.

INTERNATIONAL COOPERATION

Transparency

42. The Agreement and Rules of Procedure should be amended to include modern provisions on observers, in line with the UNFSA and other modern RFMOs.

43. The transparency of the GFCM through its website, although of a very high standard, should be slightly improved to ensure certain information, particularly relating to institutional aspects, can more easily be found.

44. Although the number of observers attending the plenary sessions seems sufficient for generating discussions with other stakeholders, the Committees, which have a lower attendance rate by observers, should consider endeavouring to reinforce their relationship with observers so their knowledge and viewpoints may be considered.

Relationship to cooperating non-members

45. The GFCM Agreement, as part of a broader review or revision, should reflect international standards on cooperation with non-members.

46. GFCM Recommendations should continue to refer to cooperating non-members, even in the absence of such States.

47. Efforts should be made to mutually identify the benefits of according cooperating non-member status or Member status to the three non-member Black Sea States, both to GFCM and to those States.

Relationship to non-cooperating non-members

48. GFCM Members should implement recommendations that deter activities by non-cooperating non-members, including implementing the recommendations of this Panel made in relation to compliance and enforcement.

Cooperation with other RFMOs

49. GFCM and ICCAT should follow up the recommendations on cooperation between the organizations in the 2008 ICCAT Performance Review and ensure broader and closer scientific and technical cooperation, particularly with respect to Bluefin tuna and swordfish in the Mediterranean and Black Sea and of strengthening mechanisms to ensure a continuous and timely exchange of data and information and closer working relations between GFCM and ICCAT scientists.

50. The Commission should review the advantages and disadvantages of automatically adopting ICCAT Recommendations, with a view to maximizing the use of time in its Annual Sessions and to ensuring harmonization of recommendations that are relevant to GFCM.

51. The Commission should explore potential mechanisms of cooperation with other RFBs, including EIFAC in respect of aquaculture in coastal areas.

52. The Commission should continue its cooperation with other international or intergovernmental organisations covering the same geographic area and operating on the same subjects as GFCM, and consider whether and how such cooperation should be expanded or strengthened.

Special requirements of developing States

53. The subregional projects should review their project development criteria to ensure stronger links with GFCM and to contribute to a greater extent to the development and implementation of Recommendations by the Commission.

54. Efforts by the Commission to develop the capacity of Members to provide the information to and implement Recommendations of the Commission should continue and be strengthened as appropriate.

55. Efforts in assistance to developing States should be further strengthened, with the expanded participation of donors as appropriate, including an extension of the MedFisis project.

FINANCIAL AND ADMINISTRATIVE ISSUES

56. A full institutional review and assessment of existing GFCM human resources, their organization, duties and general focus (on administrative or technical tasks), together with recommendations for meeting evolving needs, should be undertaken. It should take into account FAO rules regarding staff recruitment and employment and should involve a review of the objectives and programmes of GFCM, priority needs identified by the Commission, the means of assuring optimum productivity and options for recruiting personnel such as permanent staff, FAO programmes (e.g. visiting experts, junior professionals, interns, volunteers). It should further consider the effectiveness of support by the Members to the work of GFCM through national scientists, experts, administrators and focal points, consider financial sources available and recommend related actions and measures to strengthen the Secretariat. The review may be carried out by a task force led by the CAF.
57. The Commission should consider the overall costs and benefits of holding meetings in Rome or in Member countries and as appropriate agree on the types of meetings to be held in Rome, categories of expenses to be borne by host countries and staff productivity in an effort to limit the budgetary and human resource implications to the Secretariat of holding meetings outside Rome,.
58. The Secretariat should be moved as soon as possible to the new GFCM headquarters in Rome, Italy to strengthen functional autonomy, build esprit de corps and consider related changes such as amending the email address of staff to name@gfcm.org.
59. Members should ensure that their contributions to the autonomous budget are paid on time.
60. The current status of extrabudgetary contributions for specific GFCM projects should appear clearly on the relevant project website.
61. Funding mechanisms for extrabudgetary-supported activities should be explored, such as a fee system that applies to projects in which a Member may participate and derive some benefits.
62. The agreed external financial audit should be implemented within the next two years.

GUIDELINES FOR THE GFCM PERFORMANCE REVIEW

BACKGROUND

1. The Joint Meeting of the Tuna Regional Fisheries Management Organizations (RFMOs) held in Kobe, Japan (22–26 January 2007), agreed that the tuna RFMOs should have performance reviews, which should be conducted in accordance with a common methodology and a common set of criteria, taking into account as far as possible, the specific requirements of each Commission. At the Twenty-seventh Session of the FAO Committee on Fisheries (5–9 March 2007), Members emphasized the importance of conducting performance reviews and recognized that each RFMO should independently decide upon the methodology, criteria and frequency of reviews.
2. The purpose of this document is to present a possible guideline framework by which the GFCM Performance Review could be conducted.
3. The timing and deadlines for the Performance review shall be decided by the Commission. The GFCM will also decide on practical aspects related to the selection of the three external experts. Notably, and accordingly to the intended deadline for the performance review, the Commission shall establish a delay of one month for the nomination of candidates to the Executive Secretary for their inclusion in the pool of internationally recognized experts. The final list shall be circulated to Members who shall have a period of at least one month to express their preferences.

SUGGESTED APPROACH

1. Terms of reference

The evaluation of performance should be oriented towards an examination of the Commission's objectives, as stipulated in the GFCM Agreement, and the measures in place to achieve such objectives. A review of GFCM performance should include the following:

a) Assessment of the text of the Agreement, and its ability to assimilate the requirements of international fisheries instruments:

- Are objectives clearly stated, and are they consistent with other international fisheries instruments?
- Does the text of the Agreement impose any restraints on the organization that prevent it from implementing relevant international instruments?
- Are the decision-making processes adequate to reach the stated objectives?

b) Assessment of the extent to which measures adopted achieve the Commission's objectives and the objectives of international instruments:

- What measures are in place to achieve each objective?
- What is the extent of compliance with such measures?
- To what extent are the objectives being met?

c) Recommendations on how the GFCM could be improved.

2. Criteria and standards for performance review

It is suggested that Commission make use of the common criteria adopted at the sixth round of informal consultations of States Parties to the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the

Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UN fish Stock the Agreement) as presented in **Annex 1**. These criteria outline “what” (at minimum) should be assessed in the performance review.

3. Selection of experts

This proposal is for a panel of three experts, who have not been involved with GFCM in the last five years, to conduct the review. This panel shall be constituted by one expert in international legal fisheries instruments, one expert in fisheries management, and one expert in fisheries science. The GFCM Secretariat should provide adequate information and other support to the experts to facilitate their work.

The three external experts should have an appropriate level of experience in their specialized field of work, and a command of written and spoken English. Knowledge of other official languages of GFCM would be an advantage. Reviewers should be selected from a pool of internationally recognized experts. The selection should be made by Contracting Parties from a list which will be compiled by the Secretariat on the basis of nominations made by the Contracting Parties of three experts.

4. Timing

The work should be carried out within a reasonable time period as specified by the Commission, and should preferably commence no later than [xxx 2009 – to be determined].

5. Dissemination and consideration of the performance review report

The performance review report will be presented to the Commission. The Commission will consider the performance review report and any proposals or recommendations. The performance review report will be distributed to Contracting Parties and will also be posted in the GFCM Web site.

BUDGETARY REQUIREMENTS

[An incomplete indicative framework for budgetary considerations requirements was provided, estimating four weeks work by each individual three experts].

**CRITERIA FOR REVIEWING THE PERFORMANCE OF THE
GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN**

	AREA	General criteria	Detailed criteria
1	<i>Conservation and management</i>	Status of living marine resources	<ul style="list-style-type: none"> • Status of major fish stocks under the purview of the GFCM in relation to maximum sustainable yield or other relevant biological standards. • Trends in the status of those stocks. • Status of species that belong to the same ecosystems as, or are associated with or dependent upon, the major target stocks (“non-target species”). • Trends in the status of those species.
		Data collection and sharing	<ul style="list-style-type: none"> • Extent to which the GFCM has agreed formats, specifications and timeframes for data submission, taking into account the United Nations Fish Stock Agreement (UNFSA) Annex I. • Extent to which GFCM members and cooperating non-members, individually or through the GFCM, collect and share complete and accurate fisheries data concerning target stocks and non-target species and other relevant data in a timely manner. • Extent to which fishing data and fishing vessel data are gathered by the GFCM and shared among members and other RFMOs. • Extent to which the GFCM is addressing any gaps in the collection and sharing of data as required.
		Quality and provision of scientific advice	<ul style="list-style-type: none"> • Extent to which the GFCM receives and/or produces the best scientific advice relevant to the fish stocks and other living marine resources under its purview, as well as to the effects of fishing on the marine environment.
		Adoption of conservation and management measures	<ul style="list-style-type: none"> • Extent to which the GFCM has adopted conservation and management measures for both target stocks and non-target species that ensures the long-term sustainability of such stocks and species and are based on the best scientific evidence available. • Extent to which the GFCM has applied the precautionary approach as set forth in UNFSA Article 6 and the Code of Conduct for Responsible Fisheries Article 7.5, including the application of precautionary reference points. • Extent to which the GFCM has adopted and is implementing effective rebuilding plans for depleted or overfished stocks. • Extent to which the GFCM has moved toward the adoption of conservation and management measures for previously unregulated fisheries, including new and exploratory fisheries. • Extent to which the GFCM has taken due account of the need to conserve marine biological diversity and minimize harmful impacts of fisheries on living marine resources and marine ecosystems. • Extent to which the GFCM has adopted measures to minimize pollution, waste, discards, catch by lost or abandoned gear, catch of non-target species, both fish and non-fish species, and impacts on associated or dependent species, in particular endangered species, through measures including, to the extent practicable, the development and use of selective, environmentally safe and cost-effective fishing gear and techniques.
		Capacity management	<ul style="list-style-type: none"> • Extent to which the GFCM has identified fishing capacity levels commensurate with long-term sustainability and optimum utilization of relevant fisheries. • Extent to which the GFCM has taken actions to prevent or eliminate excess fishing capacity and effort.
		Compatibility of management measures	<ul style="list-style-type: none"> • Extent to which measures have been adopted as reflected in UNFSA Article 7.

		Fishing allocations and opportunities	<ul style="list-style-type: none"> • Extent to which the GFCM agrees on the allocation of allowable catch or levels of fishing effort, including taking into account requests for participation from new members or participants as reflected in UNFSA Article 11.
2	<i>Compliance and enforcement</i>	Flag State duties	<ul style="list-style-type: none"> • Extent to which GFCM members are fulfilling their duties as flag States under the treaty establishing the GFCM, pursuant to measures adopted by the GFCM, and under other international instruments, including, <i>inter alia</i>, the 1982 Law of the Sea Convention, the UNFSA and the 1993 FAO Compliance Agreement, as applicable.
		Port State measures	<ul style="list-style-type: none"> • Extent to which the GFCM has adopted measures relating to the exercise of the rights and duties of its members as port States, as reflected in UNFSA Article 23 and the Code of Conduct for Responsible Fisheries Article 8.3. • Extent to which these measures are effectively implemented.
		Monitoring, control and surveillance (MCS)	<ul style="list-style-type: none"> • Extent to which the GFCM has adopted integrated MCS measures (e.g., required use of VMS, observers, catch documentation and trade tracking schemes, restrictions on transshipment, boarding and inspection schemes). • Extent to which these measures are effectively implemented.
		Follow-up on infringements	<ul style="list-style-type: none"> • Extent to which the GFCM, its members and cooperating non-members follow up on infringements to management measures.
		Cooperative mechanisms to detect and deter non-compliance	<ul style="list-style-type: none"> • Extent to which the GFCM has established adequate cooperative mechanisms to both monitor compliance and detect and deter non-compliance (e.g., compliance committees, vessel lists, sharing of information about non-compliance). • Extent to which these mechanisms are being effectively utilized.
		Market-related measures	<ul style="list-style-type: none"> • Extent to which the GFCM has adopted measures relating to the exercise of the rights and duties of its members as market States. • Extent to which these market-related measures are effectively implemented.
3	<i>Decision-making and dispute settlement</i>	Decision-making	<ul style="list-style-type: none"> • Extent to which GFCM has transparent and consistent decision-making procedures that facilitate the adoption of conservation and management measures in a timely and effective manner.
		Dispute settlement	<ul style="list-style-type: none"> • Extent to which the GFCM has established adequate mechanisms for resolving disputes.
4	<i>International cooperation</i>	Transparency	<ul style="list-style-type: none"> • Extent to which the GFCM is operating in a transparent manner, as reflected in UNFSA Article 12 and the Code of Conduct for Responsible Fisheries Article 7.1.9. • Extent to which GFCM decisions, meeting reports, scientific advice upon which decisions are made, and other relevant materials are made publicly available in a timely fashion.
		Relationship to cooperating nonmembers	<ul style="list-style-type: none"> • Extent to which the GFCM facilitates cooperation between members and nonmembers, including through the adoption and implementation of procedures for granting cooperating status.
		Relationship to non-cooperating non-members	<ul style="list-style-type: none"> • Extent of fishing activity by vessels of non-members that are not cooperating with the GFCM, as well as measures to deter such activities.
		Cooperation with other GFCMs	<ul style="list-style-type: none"> • Extent to which the GFCM cooperates with other RFMOs, including through the network of Regional Fishery Body Secretariats.
		Special requirements of developing States	<ul style="list-style-type: none"> • Extent to which the GFCM recognizes the special needs of developing States and pursues forms of cooperation with developing States, including with respect to fishing allocations or opportunities, taking into account UNFSA Articles 24 and 25, and the Code of Conduct of Responsible Fisheries Article 5. • Extent to which GFCM members, individually or through the GFCM, provide relevant assistance to developing States, as reflected in UNFSA Article 26.

5	<i>Financial and administrative issues</i>	Availability of resources for GFCM activities	<ul style="list-style-type: none"> • Extent to which financial and other resources are made available to achieve the aims of the GFCM and to implement the GFCM's decisions.
		Efficiency and cost-effectiveness	<ul style="list-style-type: none"> • Extent to which the GFCM is efficiently and effectively managing its human and financial resources, including those of the Secretariat.
		Cooperation with other GFCMs	<ul style="list-style-type: none"> • Extent to which the GFCM cooperates with other GFCMs, including through the network of Regional Fishery Body Secretariats.
		Special requirements of developing States	<ul style="list-style-type: none"> • Extent to which the GFCM recognizes the special needs of developing States and pursues forms of cooperation with developing States, including with respect to fishing allocations or opportunities, taking into account UNFSA Articles 24 and 25, and the Code of Conduct of Responsible Fisheries Article 5. • Extent to which GFCM members, individually or through the GFCM, provide relevant assistance to developing States, as reflected in UNFSA Article 26.
5	<i>Financial and administrative issues</i>	Availability of resources for GFCM activities	<ul style="list-style-type: none"> • Extent to which financial and other resources are made available to achieve the aims of the GFCM and to implement the GFCM's decisions.
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