

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



# SCIENTIFIC ADVISORY COMMITTEE (SAC) Sixteenth Session St Julian's, Malta, 17-20 March 2014

#### INTRODUCTION

1. This document provides a synthesis of the information contained in 16 national reports received by the Secretariat up to 14<sup>th</sup> March 2014. It covers a general description of the current situation of national fisheries, progress made in the field of scientific research and data collection, as well as management measures implemented during the intersessional period. The information received has been summarized by the Secretariat in Appendix A which contains parts of text as submitted by the countries. Comparative analysis among countries has not been possible due to the heterogeneity in the formats of answers and to differences in the reported reference years. The Secretariat is working on an on-line system to facilitate the transmission of information in a more standardized way that will allow storage in a database and comparative analysis on a yearly basis.

**Research activities in Member Countries** 

2. This document, together with all respective national reports (Appendix XX of the SAC 15<sup>th</sup> Report), is intended to help Members identify opportunities for regional cooperation in research activities and management processes.

#### **GENERAL COMMENTS**

- 3. The number of Reports received -17 has decreased compared to the 20 received in 2013. The following points summarize the most remarkable observations as deduced form the analysis of the information contained in the National Reports including a list of main problems faced and suggestions for improvement of the transmission and analysis.
  - Fleet sizes (in numbers) remain constant with small variations in all countries except two countries: Croatia has doubled the fleet and Malta has reduced about 60%.
  - Fishery production remains constant or with slight variations (Greece and Italy have decreased, whilst Algeria, Malta, Tunisia and Morocco have increased)
  - 46 Stocks have been assessed and presented to the GFCM Working Groups, six more than the previous year. The number of assessments in the Black Sea area is similar to last year, confirming a good coverage of this area in relation to previous years.
  - Other 6 stock assessments (in GSAs 22 and 23) included in the national reports have been presented to other institutions, and therefore have not been validated by the SCSA and cannot be used for management advice. Notwithstanding the increase of total number of assessed

- stocks, the number of shared stocks assessed jointly by more than one country has decreased with respect to the last year.
- A continuous increase and improvement of data collection programs and statistical centralized systems is being registered, especially in Lebanon, Albania and Montenegro. Several countries have underlined the efforts being made to implement new web based and electronic systems for data collection.
- Several countries have underlined the efforts being made to implement new web based and electronic information systems.
- With regards to the mandate of reporting incidental catches of cetaceans, sharks, sea turtles, seabirds and monk seals in consistency with Recommendations in force, 8 countries submitted some information with 4 countries specifying species and catches.
- Implementation of 12 new fisheries management measures adopted by law is reported by 8 countries, mostly establishing fishing closures, limiting landing size, regulating vessel monitoring systems and implementing national management plans for certain fisheries. However, only in one case it is in direct application of a GFCM recommendation.
- Regarding research projects on fisheries most countries reported several initiatives which are being funded through different donors and mostly focusing on fish population dynamics, stock assessment, identification of sensitive habitats, fishing gear selectivity, bio-economic modeling, Ecosystem Approach to Fisheries.
- All countries carry out socio-economic studies, some of which address specifically small scale fisheries. The support of FAO Regional Projects on this issue is widely acknowledged.
- A wide variety of marine environment research activities have been reported, which include studies on alien species, habitat identification, , endangered species, marine protected areas, ecosystem-based governance, marine conservation, reduction of by-catch of non-commercial species and marine pollution.
- Suggestions for future research include subjects related to, fishing gear technology, monitoring of specific fisheries resources, coastal zone management, population dynamics, genetics, stock-recruitment interactions, essential fish habitats, artisanal fisheries, biological parameters, age reading, bio-economic modeling, indicators and reference points, identification of stock units, effect of climate change.
- A new template was released on the web site in 2013, but most countries have continued using the previous one. This prevented gathering information in accordance with several recommendations on by-catch currently in force, namely i) any event of incidental taking of cetaceans (with details of gear, area, time and location and species caught) and ii) catches and incidental taking, release and/or discarding event for shark species listed either in Annex II or III of the SPA/BD protocol. Sea turtles, seabirds and monk seals must also be reported starting with data of 2013.
- 4. The secretariat has identified a series of gaps in the information provided by the National reports that pose difficulties to perform comparative analysis in a systematic way.
  - Incomplete/unclear/not relevant answers
  - Older versions of national reports forms are often used, and therefore new recommendations are not reflected in the report.
  - High heterogeneity of data submitted
    - o reference years (vessels, catches) should be the most recent intersessional period
    - o measurement units
    - o stocks assessed (in many cases, reference year and the stock status are not provided)
- 5. To overcome these difficulties and with the aim of making of these reports a more useful tool for both the Members and the Secretariat, a new web-based template is being developed with two main objectives:
- Make easier and faster the transmission of standardized information by Members

 Create a new national reports' database which will facilitate regional and temporal comparative analysis of information provided and will allow synergies with other GFCM databases (e.g. vessels record, stock assessment information).

#### SUGGESTED ACTIONS FOR THE COMMITTEE

6. SAC is invited to review the progress of the national research activities and to identify areas of cooperation among interested Members. Furthermore, gaps in scientific monitoring and research may be identified along with the requirements for specific external support in some countries, including from sub-regional projects and other regional initiatives.

# Appendix A Summary tables of National Reports 2014 (As received by the secretariat up to 14<sup>th</sup> of March 2014)

#### Albania

#### **Section 1 - Description of fisheries**

- A. Fishing grounds (GSAs): 18
- **B.** Total landings: 3 889 tonnes (2013, 9 months); 4 919 tonnes (2012)
- **C.** Fleet: 584 vessels (2013); 597 vessels (2012)

#### Section 2 - Status of stocks of priority species

#### Section 3 - Status of statistics and information system

**A.** Description of the national system of fishery statistics and/or any improvement/change occurred National system for fisheries statistics is not in place.

VMS system built based on: "Politics and the procedures of functioning of Inter-institutional Operational Maritime Centre (IMOC) in all fishing vessels over 12 m to strengthen the surveillance of the fishing fleet and ensuring reliable, systematic and improved collection of data on the fishing fleet, catches, landings and the biological status of the stocks.

- B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects
- C. Type of data collected, transmission to GFCM Secretariat and other international bodies GFCM Task 1 data
- D. Existing databases and synergies with other applications

Newly developed Catch Information Data Base, Fishery Inspector Information Support System and Catch Validation Data Base.

#### Section 4 - Status of research in progress

### A. Fisheries research with emphasis on management oriented assessment and GFCM priority species

Kesearen/project une	Durauon	Main topic	Description
Bottom fish reserve monitoring		Biological	Biological material obtained through random sampling
in Albanian seawaters		sampling	from bottom trawlers in four ports (main species:
			haddock, mullet, anchovy, pink shrimp, sardines)

## B. Socio-economic studies of fishing communities and fishing sector Research/project title Duration Main tonic Descrip

Research/project title Duration		main topic	Description		
Survey on socio-economic data	May 2013	Collection of	More than one hundred interviews were carried out		
of Albanian fisheries		socio-economic covering the four main ports of Albania. All fishing			
		data	segments were covered. Passive gears and trawlers		
			appeared to be economically profitable in 2012, with a		
		moderate rate of return on investment for arti			
			(around 9%) and a high rate (around 46%) for big		
			trawlers.		

#### C. Marine environment studies

#### Section 5 - Involvement in activities of FAO regional projects

- A. Description of activities carried out with FAO regional projects, results obtained and assistance received AdriaMed project in 2013:
  - Monitoring activities of small pelagic and demersal species and necessary workshops and working groups to analyze results;
  - National Survey on economic and social aspects;
  - National survey on Small Scale Fisheries;

#### Section 6 - Management measures

- A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects
  - "Establishment of a National framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Albanian Fisheries Policy"
  - "Establishment of a control system for ensuring compliance with the rules of the management fisheries policy"
  - "Management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea"
  - "Establishment of a system to prevent, deter and eliminate illegal, unreported and unregulated fishing"

#### Section 7 - Environment protection measures

A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

#### A. By-catch events

No data on the incidental catches of cetaceans in Albanian waters.

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area  $\frac{1}{2}$ 

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

#### Algeria

#### Section 1 - Description of fisheries

- A. Fishing grounds (GSAs): 04
- **B.** Total landings: 108 207 tonnes (2012); 104 008 tonnes (2011)
- **C.** Fleet: 4 403 vessels (2012); 4 316 (2011)

#### Section 2 - Status of stocks of priority species

#### Section 3 - Status of statistics and information system

#### A. Description of the national system of fishery statistics and/or any improvement/change occurred

Le secteur de la pêche et des ressources halieutiques algérien, déploie de nombreux efforts pour améliorer son système statistique existant à travers un suivi quotidien des informations statistiques récoltées au niveau local et qui sont transmises à l'administration centrale pour qu'elles soient introduites automatiquement dans une base de données nationale.

# B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects

En ce qui concerne les engins de pêche, il est à rappeler qu'une étude inscrite dans le cadre du projet FAO CopeMed II relative à la sélectivité du chalut à mailles carrées a été lancée et les résultats sont en cours d'analyse.

#### C. Type of data collected, transmission to GFCM Secretariat and other international bodies

Pour ce qui est de la transmission des données statistiques à la CGPM et à toute autre institution internationale, l'Algérie a régulièrement communiqué les informations demandées.

D. Existing databases and synergies with other applications

#### Section 4 - Status of research in progress

#### A. Fisheries research with emphasis on management oriented assessment and GFCM priority species

Research/project title	Duration	Main topic	Description
Suivi de l'écosystème pélagique		Dynamique des	
exploité		écosystèmes	
		exploités	
Suivi de l'écosystème démersale		Dynamique des	
exploité		écosystèmes	
		exploités	
Suivi des grands pélagiques et		Dynamique des	
des thonidés mineurs		écosystèmes	
		exploités	

#### B. Socio-economic studies of fishing communities and fishing sector

Research/project title	Duration	Main topic	Description	
Survey on socio-economic data	May 2013	Indicateurs socio-	Programme d'enquêtes socioéconomiques sur la	
of Albanian fisheries		économiques	population des marins pêcheurs à l'échelle nationale est	
			mis en place dans l'objectif de combler le vide en matière	
			d'informations et afin de disposer des éléments qui	
			viennent pour accompagner la stratégie du développement	
			de la pêche.	l

#### C. Marine environment studies

Research/project title Duration Main topic Description

#### Section 5 - Involvement in activities of FAO regional projects

#### A. Description of activities carried out with FAO regional projects, results obtained and assistance received

Le projet de coopération avec FAO relatif à la mise en place de l'observatoire socio-économique des pêches et de l'Aquaculture cité au chapitre « État des statistiques et du système d'information » et ayant pour mission la redynamisation du réseau d'information et d'harmonisation des méthodes de collecte de données de débarquement avec l'application de l'outil SSPAL a été menée et clôturé en juin 2013.

Les principaux résultats obtenus du projet suscité sont :

- Formation de plus de 240 personnes, en matière d'échantillonnage des pêches, d'identification des espèces et des engins de pêche, d'analyse et de traitement des données, d'aménagement des pêcheries et Socio-économie des pêches.
- Mise en place d'un système d'échantillonnage des débarquements des pêches, avec l'installation d'un logiciel spécifique au niveau de trois wilayas pilotes (Alger, Ain-Temouchent et Jijel);
- Élaboration de deux rapports du diagnostic (Système statistiques des pêches en Algérie, Aménagement des pêcheries en Algérie);
- Publication d'un guide des principales espèces débarquées en Algérie;
- Acquisition des équipements bureautiques et informatiques.

#### Section 6 - Management measures

A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects

#### Section 7 - Environment protection measures

A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

A. By-catch events

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

#### Bulgaria

#### **Section 1 - Description of fisheries**

A. Fishing grounds (GSAs): 29

**B.** Total landings: 9 507 tonnes (2013); 7 974 tonnes (2012)

**C.** Fleet: 2 043 vessels (2013); 2 366 (2012)

Section 2 - Status of stocks of priority species									
Species/Stock	Ref. year	Stock status	GSA	Presented to GFCM WGs?	Presented to any other forum?				
Psetta maxima		depleted/overfishing	29	Y					
Sprattus sprattus		sustainably exploited	29	Y					
Squalus acanthias		depleted	29	Y					

#### Section 3 - Status of statistics and information system

- A. Description of the national system of fishery statistics and/or any improvement/change occurred
  Two information systems to serve the needs of different management and operative levels Information Statistical system (ISS) and Vessels Monitoring system (VMS)
- B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects
- C. Type of data collected, transmission to GFCM Secretariat and other international bodies
- D. Existing databases and synergies with other applications

#### Section 4 - Status of research in progress

A. Fisheries research with emphasis on management oriented assessment and GFCM priority species

 Research/project title
 Duration
 Main topic
 Description

 ComFish FP7
 Stakeholders involvement
 ComFish aims to identify important fisheries topics with long term impacts and ascertain whether scientific results have been properly communicated to fisheries stakeholders.

B. Socio-economic studies of fishing communities and fishing sector Research/project title Duration Main topic Description

#### C. Marine environment studies

Research/project title	Duration	Main topic	Description
FP7 EU MISIS		Environmental	Environmental monitoring of the Black Sea Basin and a
		status	common European framework programme for the
			development of the Black Sea region.
COCONET FP7		MPAs,	Towards networks of marine protected areas (from the shore
		renewable	to the high and deep sea), coupled with sea-based wind
		energy	energy potential.
PERSEUS FP7			Policy-oriented marine Environmental Research for the
			Southern European Seas.
DEVOTES FP7	2012-2016	Environmental	This project aims at improving understanding of human
		status	activities impacts (cumulative, synergistic, antagonistic)
			and variations due to climate change on marine biodiversity,
			using long-term series (pelagic and benthic).
Monitoring of the coastal		Environmental	Biological quality elements investigated in 2013 were
marine waters		status	phytoplankton, macrozoobenthos and macroalgae.

#### Section 5 - Involvement in activities of FAO regional projects

A. Description of activities carried out with FAO regional projects, results obtained and assistance received No involvement.

#### Section 6 - Management measures

- A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects
  - Council regulation (EU) No 5/2012 from 19<sup>th</sup> December 2012: Fixing for 2012 fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Black Sea
  - Council implementation regulation (EU) No 672/2013 amending Regulation (EU) No 468/2010 establishing the EU list of vessels engaged in illegal, unreported and unregulated fishing

#### Section 7 - Environment protection measures

A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

#### Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

#### A. By-catch events

Call for tenders MARE/2011/16 "Adverse fisheries impacts on cetacean populations in the Black Sea" is in progress and will bring data and results related to by0-catch and mitigation measures.

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

# Section 10 - Proposals for future research programmes - Age reading of anchovy, red mullet and turbot

- Stock identification study for turbot (Psetta maxima)
- BlackSeaFish project proposal
- Effects of beam trawling on the seabed habitats and mussel beds
- Promote and integrate fisheries research as part of Ecosystem Based Management

#### Croatia

#### **Section 1 - Description of fisheries**

A. Fishing grounds (GSAs): 18, 19

**B.** Total landings: 62 297 tonnes (2012); 69 700 tonnes (2011)

**C.** Fleet: 7 770 vessels (2012); 4 232 vessels (2011)

#### Section 2 - Status of stocks of priority specie Species/Stock Ref. year Stock status GSA Presented to Presented to any GFCM WGs? other forum? Sardina pilchardus 2012 high risk of overexploitation 17 Y overexploited and in overexploitation Engraulis encrasicolus 2012 17 2012 17 $\overline{\mathbf{v}}$ Solea solea overfished 2012 17 Mullus barbatus overfished Y

#### Section 3 - Status of statistics and information system

- A. Description of the national system of fishery statistics and/or any improvement/change occurred

  Croatian Fishing Fleet Register is an electronically-kept register, now web-based, in which relevant data on vessels and vessel activities are registered. At the moment, data are being entered and cross-checked.
- **B.** Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects
- C. Type of data collected, transmission to GFCM Secretariat and other international bodies
- **D.** Existing databases and synergies with other applications

  Croatia has established links between responsible authorities (Croatian Bureau of Statistics and the MoA) in order to meet the relevant requirement and secure the delivery of statistical data in a unified manner.

#### Section 4 - Status of research in progress

A. Fisheries research with emphasis on management oriented assessment and GFCM priority species

Research/project title	Duration	Main topic	Description
DEMMON		Evaluation of	Fisheries and biological data collection includes on board
		demersal	sampling and laboratory analysis, sampling on the landing
		resources	ports and gathering basic socio-economic data.
PRIMO		Monitoring of	
		coastal fisheries	
MEDITS	Since 1996	Biological	Mediterranean International Bottom Trawl Survey.
		sampling	
SOLEMON	LEMON Evaluation		Evaluation of stock of common Sole (Solea solea) and other
		demersal	flatfish in the Adriatic Sea.
		resources	
DEEP SEA	Since 2008	Evaluation of	Investigation of distribution and status of biological resources
			in deep south Adriatic.
UWTV	Since 2011	Evaluation of	Alternative assessment of biomass stock of Norway lobster.
		resources	

B. Socio-economic studies of fishing communities and fishing sector Research/project title Duration Main topic Description

#### C. Marine environment studies

Research/project title	Duration	Main topic	Description
Systematic exploration of the		Environmental	Monitoring of biotic and abiotic parameters relevant to the
Adriatic Sea as basis for		status, renewable	marine environmental and renewable resources.
sustainable resources		energy	
management			

#### Section 5 - Involvement in activities of FAO regional projects

A. Description of activities carried out with FAO regional projects, results obtained and assistance received Croatia is fully involved in all activities carried out by AdriaMed project.

#### Section 6 - Management measures

A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects

#### Section 7 - Environment protection measures

A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

#### Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

#### A. By-catch events

No by-catches of cetaceans were recorded in 2013.

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

B. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

There were no recorded by-catches of Annex II or III shark species.

- Concerning small pelagic fish species, determination and monitoring of spawning grounds as well as nursery area is necessary
- International monitoring of demersal resources in Jabuka Pit. Jabuka/Pommo Pit as principal fishing ground in the Adriatic Sea for Croatian and Italian bottom trawl fisheries fleet.

#### **Egypt**

#### **Section 1 - Description of fisheries**

A. Fishing grounds (GSAs): 26

**B.** Total landings: 69 332 tonnes (2012); 77 799 tonnes (2011)

**C.** Fleet: 4464 vessels (2012); 4 529 (2011)

Sect	ection 2 - Status of stocks of priority species									
	Species/Stock	Ref. year	Stock status	GSA	Presented to GFCM WGs?	Presented to any other forum?				
	Metapenaeus stebbingi		in overfishing	26	N					
ĺ	Euthynnus alletteratus	2013	overexploited	26	N					
ĺ	Saurida undosquamis	2012	in overfishing (high)	26	Y					
ĺ	Mullus surmuletus	2012	in overfishing (high)	26	Y					

#### Section 3 - Status of statistics and information system

- A. Description of the national system of fishery statistics and/or any improvement/change occurred

  The General Authority for Fish Resources Development (GAFRD) collects fisheries data. The statistics collection
  procedures have recently been upgraded and monitoring, control and surveillance activities have been improved.
- B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects

  Evaluation of lizard fish, red mullet, shrimp, sepia and sardine with the support of FAO EastMed project.
- C. Type of data collected, transmission to GFCM Secretariat and other international bodies
- D. Existing databases and synergies with other applications

#### Section 4 - Status of research in progress

A. Fisheries research with emphasis on management oriented assessment and GFCM priority species

Research/project title

Duration

Stock assessment

Scattered stock assessment studies are conducted by different universities and by the National Institute of Fisheries and Oceanography.

Gear selectivity

The Arab Academy for Science and Technology and Maritime Transport started a study to improve the Egyptian bottom trawl selectivity and reduce the high rate of by-catch in trawling activities.

B. Socio-economic studies of fishing communities and fishing sector

Research/project title	Duration	Main topic	Description
		Socio-economic	A sampling survey in order to investigate the main socio-
		data	economic characteristics of the fishing vessels by type of
			fishery, the study was conducted with the EastMed project
			support.

C. Marine environment studies

Research/project title Duration Main topic Description

#### Section 5 - Involvement in activities of FAO regional projects

A. Description of activities carried out with FAO regional projects, results obtained and assistance received

#### **Section 6 - Management measures**

A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects

#### Section 7 - Environment protection measures

A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

The Gulf of Sallum was declared as the first marine Egyptian protected area in the Mediterranean Sea by the Egyptian Prime Minister's decision No. 533 (2010) for the purpose of fisheries and biodiversity conservation.

#### Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

A. By-catch events

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

- Section 10 Proposals for future research programmes

   Research on stock status and exploitation levels of the main pelagic fisheries.
  - Fishing harbour facilities need to be improved at strategic sites.
  - Enlarge and modernize offshore fishing in the Egyptian EEZ and international waters.

#### France

#### Section 1 - Description of fisheries

A. Fishing grounds (GSAs): 08, 09

**B.** Total landings:

**C.** Fleet: 1 455 vessels (2012); 1 325 vessels (2011)

ection 2 - Status of stocks of priority species									
Species/Stock	Ref. year	Stock status	GSA	Presented to GFCM WGs?	Presented to any other forum?				
Merluccius merluccius		high overexploitation	07						
Mullus barbatus		high overexploitation							
Engraulis encrasicolus		stable biomass, decreasing production	07						
Sardina pilchardus		stable biomass, increasing abundance	07						

#### Section 3 - Status of statistics and information system

- **A.** Description of the national system of fishery statistics and/or any improvement/change occurred Système d'Information Halieutique (SIH) de l'Ifremer.
- B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects
- C. Type of data collected, transmission to GFCM Secretariat and other international bodies
  SIH considère l'ensemble du système pêche, dans toutes ses composantes et sur l'ensemble des façades. Il s'appuie
  notamment sur l'échantillonnage des captures commerciales (à terre et en mer) dont les paramètres biologiques, les
  campagnes à la mer, les pêches récréatives, les statistiques de pêche, les enquêtes activités et économiques. Il est
  dépositaire des cahiers des charges et des spécifications techniques pour les plans d'échantillonnage, la collecte, le
  stockage, l'accès aux données halieutiques, les restitutions internes et externes. Il élabore des indicateurs intégrés
- **D.** Existing databases and synergies with other applications

  Données intégrées dans la base HARMONIE et les protocoles sont disponibles sur un site web dédié (www.ifremer.fr/sih). La collecte des données de Méditerranée sur les ressources exploitées par la pêche professionnelle est réalisée dans le cadre de la DCF (Data Collection Framework).

sur les pêcheries et réalise des synthèses à destination des acteurs de la filière pêche et du grand public.

#### Section 4 - Status of research in progress

A. Fisheries research with emphasis on management oriented assessment and GFCM priority species					
Research/project title	Duration	Main topic	Description		
Programme d'échantillonnage biologique et paramètres biologiques		Echantillonnage biologique	Structure en taille et/ou en âge des captures (apports commerciaux) des principales espèces exploitées par différents métiers, ainsi que les paramètres biologiques afférents, pour l'évaluation des stocks.		
ObsDeb		Enquêtes d'activités et des ébarquements des navires de moins de 12 mètres	Enquêtes mensuelles sont conduites pour estimer le calendrier d'activité de chaque navire de pêche professionnelle < 12 m en mer et en lagune, et l'effort de pêche et la production des navires par échantillonnage aléatoire des marées, de la frontière italienne à la frontière espagnole (GSA 07). En Corse (GSA 08), l'activité des navires est recensée par enquête chaque année.		
ObsMer		Observation des captures	L'objectif d'ObsMer est de permettre une meilleure compréhension de l'interaction entre les ecosystèmes marins et les activités de pêche. Le programme vise à observer la capture dans son ensemble et les activités de pêche, ainsi que l'environnement de la marée. Ces données servent notamment pour le calcul d'indicateurs de capture aux niveaux régional, national et européen, qui sont utilisées pour les évaluations de stocks.		
ObsMam		Observation des captures accidentelles de mammifères marins	Ce programme d'observation a été tenu d'assurer chaque année une couverture de 5% de la flottille pratiquant le chalutage pélagique. Depuis 2008, ce programme est inclus dans le programme OBSMER.		
Programme d'observations du thon rouge	depuis 2009	Thon rouge	Prospections aériennes du thon rouge dans le golfe du Lion.		
SELPAL		Thon rouge	Programme sélectivité de la flottille palangrière ciblant le thon rouge dans le golfe du Lion.		
MEDITS	depuis 1993	Pratiques d'échantillonnage	Campagne française de chalutage annuelle d'évaluation des ressources démersales.		
PELMED	depuis 1993	Évaluation des stocks de petits pélagiques	Évaluation des stocks de petits pélagiques menée une fois par an en juillet avec l'aide de prospections acoustiques, par la méthode d'écho intégration (à l'aide du logiciel Movies+) et de chalutages d'identification associés.		
RECOPESCA		Géolocalisation	Projet pilote pour tester un système de géolocalisation de		

Research/project title	Duration	Main topic	Description			
			navires de pêches exploitant la technologie RECOPESCA, pour caractériser précisément l'effort de pêche de métiers ou de navires concernés par les plans de gestion européens et non équipés de système VMS.			
B. Socio-economic studies of fishing communities and fishing sector						

Main topic

Description

C. Marine environment studies

Research/project title

Research/project title	Duration	Main topic	Description
EcoPelGol	2012- 2015	Etude de la	Ce projet s'attache mécanismes gouvernant la dynamique
		dynamique de	et l'état des populations de petits pélagiques dans le Golfe
		l'Ecosystème	du Lion à partir des données PELMED ainsi que des
		Pélagique du	échantillons biologiques reçus mensuellement.
		Golfe du Lion	
IPEP	depuis 2010	Impact de la	Ce projet a pour objectif d'acquérir des connaissances sur
		pêche sur les	l'écologie des requins pélagiques et des tortues marines et
		espèces protégées	d'identifier les interactions avec les engins de pêche

#### Section 5 - Involvement in activities of FAO regional projects

Duration

A. Description of activities carried out with FAO regional projects, results obtained and assistance received

#### Section 6 - Management measures

- A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects
  - "Elaboration de Plans de Gestion en application du règlement européen (CE) 1967/2006"

#### Section 7 - Environment protection measures

A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

#### Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

A. By-catch events

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

#### Section 10 - Proposals for future research programmes

# Section 11 - Recommendation GFCM/35/2011/4 on the incidental by-catch of sea turtles in fisheries in the GFCM competence area

A. By-ca	atch even	ts							
Species	N specimen	Day/month/year	Vessels' type	Gear	GSA or statistical grid	Main target species	N discarded dead	N released alive	N unknown
Caretta caretta	48	2010-2013	Trawlers				3	44	1
Caretta caretta	7	2010-2013		Hooks and lines			1	6	
Caretta caretta	62	2010-2013		Lift/sourrou nding nets			18	21	23
Dermochelys coriacea	1	2010-2013		Lift/sourrou nding nets				1	
Dermochelys coriacea	2	2010-2013		unknown				2	

#### Greece

#### Section 1 - Description of fisheries

A. Fishing grounds (GSAs):

**B.** Total landings: 60 090 tonnes (2012, provisional data); 62 847 tonnes (2011)

**C.** Fleet: 15 844 vessels (31/12/2013); 16 696 (31/12/2012)

Section 2 - Status of stocks	ection 2 - Status of stocks of priority species						
Species/Stock	Ref. year	Stock status	GSA	Presented to GFCM WGs?	Presented to any other forum?		
Engraulis encrasicolus	2000-2008	Fully exploited	22				
Sardina pilchardus	2000-2008		22				
Mullus barbatus	2009		22, 23				
M. surmuletus	2009		22, 23				
Merluccius merluccius	2009		22, 23				
Parapeneus longirostris	2009		22, 23				

#### Section 3 - Status of statistics and information system

#### A. Description of the national system of fishery statistics and/or any improvement/change occurred

The Hellenic Statistical Authority (EL.STAT). No significant changes of the pattern of collecting fisheries data have taken place during the last years.

The Directorate General for Fisheries (Ministry of Rural Development, and Food) collects data on: a) fish landing data for specific species (bluefin, swordfish and albacore); b) statistical trade data concerning imports, exports and re-exports of swordfish and bigeyed tuna; c) statistical data concerning imports of fishery products from third countries; d) fish landing data from vessels that land catches to foreign ports.

- B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects
- C. Type of data collected, transmission to GFCM Secretariat and other international bodies
- D. Existing databases and synergies with other applications

#### Section 4 - Status of research in progress

A. Fisheries research with emphasis on management oriented assessment and GFCM priority species

Research/project title	Duration	Main topic	Description
National Fisheries Data Collection Programme	2011-2013	Biological-Metier- related variables	Data on landings and discards for all the métiers were collected for the last quarter of 2013 through on-board and on-shore sampling. The data collection has covered the 70-90% of the sampling goal for the given period depending on the métier and region.
National Fisheries Data	2011-2013	Stock-related	Data collection for the stock-related variables (age, length,
Collection Programme		variables	weight, sex, maturity and fecundity).
National Fisheries Data Collection Programme	2011-2013	Eel monitoring	Annual and the monthly eel productions (t) per lagoon were recorded; eel samples were collected and for each sample all the biological characteristics (length, weight, diameter of the eye, length of pectoral fin) were measured, while biological samples, i.e. parasites, otoliths and gonads, were also collected.
MEDITS	2011-2013	Biological sampling	
MEDIAS	2011-2013	Biological sampling	
Estimation of Biological Parameters and transversal variables relating to the fishing activity of drifting long lines	2013	Biological sampling	Length composition and the age structure of catches of swordfish estimated from random measurements of individuals landed from drifting long line fishery which targets swordfish ( <i>Xiphias gladius</i> ), blue-fin tuna ( <i>Thunnus thynnus</i> ) and albacore ( <i>Thunnus alalunga</i> ).
Management plan for the operation of traditional Hellenic boat seines		Management plan	Management plan focused on the traditional seines called 'vintzotrates' operating in Hellenic waters.
TrawlPlan		Management plan	Management plan for the demersal trawl fisheries in the Aegean and Ionian seas.
Molecular methods for marine biodiversity assessment, the traceability of fisheries products and the identification of fish populations		Identification of fish species	Molecular methods applied in defining potential genetic population structures within the area of repartition of a particular fish species.
Archimedes		Fisheries controls	Estimation of maximum net length of trammel nets, gillnets and combined bottom set nets by using an algorithm based on the technical characteristics of these gears to enable the Fisheries

Research/project title	Duration	Main topic	Description
			Inspectors to estimate the length of the net using its volume or
			weight.
DeepFishMan		Deep-sea fisheries	Management and Monitoring of deep-sea fisheries and stocks with the objectives of: i) identifying and developing new and more effective monitoring and assessment methods, reference points, control rules and a management framework to be used in the short term and ii) developing a long-term monitoring and management framework to achieve reliable long-term management requirements.
Stock units in the Mediterranean		Identification of stock units	Identification of distinct biological units (stock units) for different fish and shellfish species and among different GFCM-GSAs.
MESMA		Spatial planning	MESMA project focuses on marine spatial planning and aims to produce integrated management tools (concepts, models and guidelines) for monitoring, evaluation and implementation of Spatially Managed Areas (SMAs).
MEDPEL		Catch and by-catch rate	Catch rate determination of albacore, swordfish and bluefin tuna and the characterization and quantification of associated by-catch and discards in Mediterranean pelagic long-lines fisheries.
CREAM		EAF	Coordinating research in support to application of EAF (Ecosystem Approach to Fisheries) and management advice in the Mediterranean and Black Seas.

B. Socio-economic studies of fishing communities and fishing sector

Research/project title	Duration 1	Main topic	Description
National Fisheries Data Collection Programme	2011-2013	Economic variables	Collection of the socio-economic variables
BEMTool		Bio-Economic Modelling tools	Development of an integrated bio-economic modeling tool to develop and support multi-objective approaches for fisheries management.
JAKFISH		Stakeholders	Judgment And Knowledge in Fisheries Involving StakeHolders is a project to examine and develop the institutions, practices and tools that allow complexity and uncertainty in fisheries management to be effectively taken into consideration within participatory decision-making processes.
MAREA		Knowledge transfer	Mediterranean hAlieutic Resources Evaluation and Advice – Horizontal Services is a project which aims to organize a consortium of European research Institutes and Centre with expertise in fisheries research and which will be readily available to offer scientific advice on fisheries issues.
FISHINMED		Sustainable small- scale fishing communities	Mediterranean Network linking public and private institutions to support the social-economic local development of small-scale fishing communities thus favouring the diversification of fishing activities and the socio-economic relations for an integrated valorisation of the coastal area.
SOCIOEC		Stakeholders	European wide project bringing together scientists from several fisheries sciences with industry partners and other key stakeholders to work in an integrated manner on solutions for future fisheries management that can be implemented at a regional level.
MYFISH	2009-2015	MSY	Maximising yield of fisheries while balancing ecosystem, economic and social concerns. This project will: i) provide definitions of MSY variants which maximize other measures of "yield" than biomass and which account for the fact that single species rarely exist in isolation; ii) redefine the term "sustainable" to signify that Good Environmental Status (MSFD) is achieved and economically and socially unacceptable situations are avoided, all with acceptable levels of risk.

#### C. Marine environment studies

Research/project title	Duration	Main topic	Description
Albamonte		Alien species	Assessment of distributional patterns of a selected number of
			invasive alien marine species in the Albanian and Montenegrin
			coasts.
MIAS		Alien species	Inventory of marine invasive alien species across European
			seas.
ARCHITECTURE		Coastal ecosystems	Architecture and roadmap to manage multiple pressures on
			lagoons; the project aims to the study and management of
			coastal marine aquatic ecosystems such as coastal wetlands.
DEVOTES		Environmental status	Development of innovative tools for understanding marine
			biodiversity and assessing good environmental status.
Monitoring of protected	2013	MPAs	Scientific monitoring of three protected marine areas, created

Research/project title	Duration	Main topic	Description
coastal marine areas			around artificial reefs in the Aegean and Ionian Sea.
BENTHIS		Benthos	Study of the diversity of benthic ecosystem in European waters
			and the role of benthic species in the ecosystem functioning.
			Fisheries impact is studied on benthic organisms and on the geo-
			chemistry.
ODEMM		Coastal ecosystems	The overall aim of the ODEMM project is to develop a set of
			ecosystem management options that would deliver the
			objectives of the Marine Strategy Framework Directive, the
			Habitats Directive, the European Commission Blue Book and
			the Guidelines for the Integrated Approach to Maritime Policy.
ConShagAudMIBAGR		Seabirds	Concrete Conservation Actions for the Mediterranean Shag and
			Audouin's Gull in Greece, including the inventory of relevant
			marine Important Bird Areas (mIBAs).
CoralFISH		Corals	Assessment of the interactions between corals, fish and
			fisheries, in order to develop monitoring and predictive
			modelling tools for ecosystem based management in the deep
			waters of Europe and beyond.
Kouponia		Coastal ecosystems	Collection of environmental, ecological, oceanographic and
			fisheries data for the Argolikos gulf.
MEDISEH		Sensitive habitats	This study aims at the compilation and mapping of
			environmental and fisheries related information in the
			Mediterranean Sea by means of Geographical Information
			Systems (GIS). Integration and mapping of the spatial
			information on sensitive habitats.
NETMED		MPAs	Design of an ecologically coherent network of marine protected
			areas for the entire Mediterranean basin, based on the principles
			of systematic conservation planning; an efficient, transparent
			and holistic approach for marine reserves design, which informs
			their location, configuration and management.
PEGASO		ICZM	Building on existing capacities and develop common novel
			approaches to support integrated policies for the coastal, marine
			and maritime realms of the Mediterranean and Black Sea Basins
			in ways that are consistent with and relevant to the
			implementation of the ICZM Protocol for the Mediterranean.
WISER		Environmental status	Integrative system to assess ecological status and recovery by
			developing tools for the integrated assessment of the ecological
			status of the European surface waters.

#### Section 5 - Involvement in activities of FAO regional projects

- **A.** Description of activities carried out with FAO regional projects, results obtained and assistance received Participation in EastMed FAO Project activities (April 2013-February 2013):
  - Training course improving the analysis of fisheries data (Rome, Italy, November 2013), co-organised by EU, FAO, EastMEd and other FAO sub-regional projects.
  - Annual meeting of the permanent working group of EastMed Project on stock assessment (Kavala, Greece, September 2013)

#### Section 6 - Management measures

- A. Description of the management measures (legislation, regulations, etc.) taken in direct response to GFCM recommendations including assessment of their effects
  - National management plan for small pelagics establishing annual license systems, defining reference points and targets for the sustainable exploitation of sardine and anchovy. Implemented in 2012.
  - Progress in the development of national management plans for trawling and for eel.

#### Section 7 - Environment protection measures

A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

A. By-catch events

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

#### Italy

#### Section 1 - Description of fisheries

**A.** Fishing grounds (GSAs): 09, 10, 11, 15, 16, 17, 18

**B.** Total landings: 195 800 tonnes (2012); 210 324 tonnes (2011)

**C.** Fleet: 12 897 vessels (2012); 13 078 (2011)

Species/Stock	Ref. year	Stock status	GSA	Presented to GFCM WGs?	Presented to any other forum?
Merluccius merluccius	2012	high overfishing	12, 13, 14, 15, 16	Y	
M. merluccius	2012	high overfishing	18	Y	
M. merluccius	2010	overexploited	09	Y	
Mullus barbatus	2011	overexploited	15, 16	Y	
M.barbatus	2012	sustainable exploitation	10	Y	
M. barbatus	2010	overexploited	09	Y	
Solea vulgaris	2012	high overfishing status	17	Y	
Pagellus erythrinus	2011	overexploited	15, 16	Y	
P. erythrinus	2009	overexploited	09	$\mathbf{Y}^{1}$	
Mullus surmuletus	2010	overexploited	09	Y	
Lophius budegassa	2010	overexploited	15, 16	Y	
Nephrops norvegicus	2010	overexploited	09	Y	
Squilla mantis	2011	overexploited	17	Y	
S.mantis		overfishing	09	N	
Parapenaeus longirostris	2012	high overfishing status	18	Y	
P. longirostris	2012	high overfishing status	12, 13, 14, 15, 16	Y	
P. longirostris	2010	moderately exploited	09	Y	
Aristaeomorpha foliacea	2010	overexploited	15, 16	Y	
A. foliacea		overfishing	11	N	
A. foliacea		overfishing	09	N	
A. antennatus	2010	overexploited	09	Y	
Engraulis encrasicolus	2012	overexploitation	16	Y	
E. encrasicolus	2012	overexploited and in overexploitation	17	Y	
Sardina pilchardus	2012	overexploited and in overexploitation	16	Y	
S. pilchardus	2012	high risk of overexploitation	17	Y	

#### Section 3 - Status of statistics and information system

- **A.** Description of the national system of fishery statistics and/or any improvement/change occurred Fishery statistics are collected within the European Regulation on Data Collection (EU reg. n. 199/2008). Statistics are produced on the basis of a sample of national fishing fleet, yearly updated, and their reliability is guaranteed by specific validation software. The General Directorate for Fisheries and Aquaculture (MIPAAF) is in charge of the overall coordination of the implementation of the National Data Collection Programme.
- B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects
- C. Type of data collected, transmission to GFCM Secretariat and other international bodies
  Fishery statistics are transferred to GFCM (through the Task 1 tool), to the European Commission, to Eurostat and to other RFMOs (like ICCAT). They are currently used by the national administration to support political decisions and to monitor the state of the fishing sector.
- D. Existing databases and synergies with other applications

Within the European Regulation on Data Collection (EU reg. n. 199/2008) a centralized database has been developed to store fishery statistics (capacity, effort and landings data), economic data of the fleet, economic data of the aquaculture sector, economic data of the processing industries, biological data (parameters of the population by species and surveys data), and ecosystem indicators.

and aquaculture

Reg. 1100/2007.

Assessment of Anguilla anguilla in the framework of UE

<b>Section 4</b>	Section 4 - Status of research in progress					
A.	A. Fisheries research with emphasis on management oriented assessment and GFCM priority species					
Res	search/project title	Duration	Main topic	Description		
			Knowledge	Development of a net for the exchange of information		
			transfer	between national researchers		
			GIS tools	Development of the System GIS-PESCA on the entire		
				coastline also including aquaculture sites.		
			Fish products	Nutritional and safety aspects of fish species from fishery		

safety

Eel

<sup>1</sup> not validated

Research/project title	Duration	Main topic	Description
		Stock assessment	Preliminary assessment of the main species of
			Elasmobranchs.
		Fish parasites	Diffusion of Anisakis sp and potential risks.
		Fish products	Species identification of fishery products.
		safety	
		Knowledge	Dissemination of scientific data, stock assessment data
		transfer	among fishers.
		Stock assessment	Optimization of methodologies of sampling for stock
			assessment
		Bio-economy	Bio-economic models

B. Socio-economic studies of fishing communities and fishing sector

Research/project title	Duration	Main topic	Description
		Socio-economics	Productive structures analyses and socio-economic
		indicators	characteristics of Italian Fisheries.
			Sustainability and management tools for Italian fishery:
			an impact assessment of TURF.

#### C. Marine environment studies

Research/project title	Duration	Main topic	Description
		By-catch	Assessment of by-catch of protected species in the
			pelagic trawl
		Red coral	Assessment of the red coral in the Italian seas

#### Section 5 - Involvement in activities of FAO regional projects

- **A.** Description of activities carried out with FAO regional projects, results obtained and assistance received AdriaMed, MedSudMed and EastMed projects:
  - 5 joint scientific surveys have been jointly carried out in the Adriatic Sea;
  - 2 joint stock assessment (*Parapnaeus longirostris*, *Merluccius merluccius*) have been produced in the south-central Mediterranean (Straits of Sicily);
  - 6 joint stock assessment (Parapnaeus longirostris, Merluccius merluccius, Mullus barbatus, Solea solea, Engraulis encrasicolus, Sardina pilchardus) have been produced in the Adriatic Sea;
  - 4 stock assessment (*Mullus barbatus*, *Saurida undosquamis*, *Metapenaeus stebbingi*, *Spicara smaris*) have been produced with the support of the EastMed Project.
  - Involvement either trainer and/or trainees in 12 theoretical or on-the-job training activities on the collection, storing and processing of fishery related data;
  - Involvement in 17 technical meetings in the Adriatic Sea, the Straits of Sicily and the Eastern Mediterranean including working groups on demersal and small pelagic fisheries resources, study groups, seminars and technical meetings.
  - Technical supported has been provided to Turkey, Egypt, Lebanon, Albania and WBGS for the establishment of a monitoring system for fisheries (socio-economic and catch and effort).
  - Within the EastMed Project a fisheries independent survey was in conduct in Egypt to explore the possibility of exploiting the venus clam Chamelea gallina.

#### Section 6 - Management measures

A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects

#### **Section 7 - Environment protection measures**

A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

#### Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

Species	N specimen	Day/month/ year	Vessels' type	Gear	GSA or statistical grid	Main target species	N discarded dead	N released alive	N unknown
Tursiops truncatus	31/year	2006-2013	mid-water pair trawlers		17				

## Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

Species	Annex	: <b>N</b>	Weight	Day/month/	Vessels'	Gear	GSA	Retained	N discarded	N released
_		specimen	(tonnes)	year	type			for sale?	dead	alive
Alopias vulpinus	III							Y		
Prionace glauca	III									
Pteromylaeus bovinus	n.a.									
Mustelus spp.	III							Y		
Pteroplatytrygon violacea	n.a.									
Raja spp.	n.a.									
Squalus acanthias	III							Y		
Myliobatis aquila	n.a.									

#### Section 10 - Proposals for future research programmes

From a general point of view, the following lines of research are proposed:

- evaluating optimal exploitation strategies and adequate indicators and reference points for multispecies fisheries;
- studying stock-recruitment relationships;
- improving knowledge on population biology and to identify the population units (stock boundaries);
- revising borders of some GSAs on the basis of available information
- mapping spawning grounds and other essential fish habitats
- assessing impact of fishing on communities and ecosystems
- investigating effect of climate change on stock dynamics
- evaluating spatial management measures (no take zones, fishery restricted areas, marine protected areas)
- improving knowledge on the effect of fishery at ecosystem level, performing specific studies on discards and impact on the sea bottoms.
- developing the assessments by bio-economic models

In special areas such as the Strait of Sicily and the Adriatic Sea, where straddling and transboundary stocks are shared by fisheries of several countries, it is considered relevant:

- improving knowledge on population biology and the identification of population units, including genetic approaches, to clarify relationships and connectivity among populations;
- supporting a common collection of data on stocks and fisheries, based on both fishery independent and dependent approaches, within the framework of an international program;
- assisting the develop of a common geo referred data base reporting both bathymetric, substratum features, biocenoses, and fishing grounds at regional level.

# $Section \ 11 - Recommendation \ GFCM/35/2011/4 \ on \ the \ incidental \ by-catch \ of \ sea \ turtles \ in \ fisheries \ in \ the \ GFCM \ competence \ area$

	Α.	By-catch ev	ents							
i	Species	N specim	Day/month/year en	Vessels' type	Gear	GSA or statistical grid	Main target species	N discarded dead	N released alive	N unknown
	Caretta	caretta							95%	

#### Lebanon

#### **Section 1 - Description of fisheries**

A. Fishing grounds (GSAs): 27
 B. Total landings: 4 540 t (2012)
 C. Fleet: 2 662 vessels (2004)

#### Section 2 - Status of stocks of priority species

Species/Stock Ref. year Stock status GSA Presented to Presented to any GFCM WGs? other forum?

#### Section 3 - Status of statistics and information system

# A. Description of the national system of fishery statistics and/or any improvement/change occurred Country-wide data collection carried out by the Institute of the Environment, University of Balamand (IOE-UOB). CIHEAM Pesca Libano Project developed a Marine Coastal Information System (MCIS) which is a multipurpose, interoperable and extensible platform based on a spatial relational database in a modular server/client structure, remotely accessible by multiple users and with different software tools, and with a set of dedicated web-based tools to explore and manage the wide range of fisheries related data collected and organized by the Pesca Libano project.

B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects

Ministry of Agriculture (MOA) through the assistance of FAO EastMed Project (in collaboration with University of Balamand) started a pilot project to collect catch data for the whole Lebanese coast as of the second half of 2013. MOA staff is receiving training and collecting data that should cater for Task 1 requirements. Major difficulties were encountered by data collectors. Data entry is supposed to follow FLOUCA model, but expected to be webbased. The system is expected to be fully operational in 2015.

- C. Type of data collected, transmission to GFCM Secretariat and other international bodies
- **D.** Existing databases and synergies with other applications
  FLOUCA (Fish Landing Operational Utility for Catch Assessment) based on the generic software and standard statistical methodology available on the web by the FAO (ARTFIAH).

#### Section 4 - Status of research in progress

A. Fisheries research with emphasis on management oriented assessment and GFCM priority species

Research/project title

National Artisanal Fisheries
Dependent Data Collection
Program

Data collection
development of regionally consistent fisheries management
plans among the Eastern Mediterranean countries through the
monitoring of commercial fisheries and the initialization of
fishery management capacity in Lebanon.

B. Socio-economic studies of fishing communities and fishing sector

Research/project title	Duration	Main topic	Description	
Wide socio-economic survey	2013	Socio-economic	Sample based country wide socio-economic survey was	
		data collection	conducted in 2013 in collaboration with FAO EastMed	
			Project. Data are still being analyzed.	

#### C. Marine environment studies

Research/project title	Duration	Main topic	Description
PEGASO	2010-2014	ICZM	
	2011-2013	Environmental	Evaluating coastal risk on the Chekka El Heri beach through
		status	the assessment of the physical oceanographic parameters.
	2013	MPAs	Marine Surveys to enhance the effective conservation of
			regionally important coastal and marine biodiversity features,
			through the creation of an ecologically coherent MPA
			network in the Mediterranean region.

#### Section 5 - Involvement in activities of FAO regional projects

- A. Description of activities carried out with FAO regional projects, results obtained and assistance received Participation in EastMed FAO Project activities:
  - Fishing Licensing System
  - Catch assessment pilot study in collaboration with University of Balamand
  - Feasibility study for a new fishing vessels design and/or new vessel building materials
  - Pilot country-wide socio-economic survey

#### Section 6 - Management measures

- A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects
  - Minister Decision 1154 on 9/12/2013 "General conditions for the protection of cetaceans"
  - Minister Decision 1160 on 10/12/2013-"General conditions for the fishing of sharks"
  - Minister Decision 1163 on 12/12/2013-"General conditions for the protection of seabirds"

#### Section 7 - Environment protection measures

A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

#### Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

A. By-catch events

Information not available.

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

Information not available.

- Promote and integrate fisheries research as part of Ecosystem Based Management
- Develop a sustainable national "information system" for artisanal fisheries in collaboration with the different research centers in the Lebanon and the region (East-Mediterranean Basin)
- Assess stocks of commercial fish species in Lebanon
- Identify and assess common stocks in the East-Mediterranean Basin
- Monitor invasive species in Lebanese waters and their population dynamics

#### Malta

#### **Section 1 - Description of fisheries**

A. Fishing grounds (GSAs): 15

**B.** Total landings: 2 357 tonnes (2013); 1 527 tonnes (2012)

**C.** Fleet: 1 040 vessels (31/12/2013); 2 989 vessels (31/12/12)

Sect	ction 2 - Status of stocks of priority species							
	Species/Stock	Ref. year	Stock status	GSA	Presented to GFCM WGs?	Presented to any other forum?		
	Merluccius merluccius	2012	high overfishing	12-16	Y			
	Parapenaeus longirostris	2012	high overfishing	12-16	Y			
	Mullus surmuletus	2012	high overfishing	15-16	Y			
	Nephrops norvegicus	2012	sustainable exploitation	15-16	Y			

#### Section 3 - Status of statistics and information system

#### A. Description of the national system of fishery statistics and/or any improvement/change occurred

Malta is at present developing a Fisheries Information System (FIS). The FIS under development will be an integrated system whereby the databases related to the fleet register, catch assessment survey, logbooks, biological sampling, biological surveys and economic surveys will be consolidated. All data submission obligations in connection with GFCM, EC and ICCAT will in the future be handled through the new FIS.

- B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects
- C. Type of data collected, transmission to GFCM Secretariat and other international bodies

Malta collects data on catch and effort for each segment by species, by quarter and by geographical origin. Catch and effort figures are based on data reported in logbooks (for vessels over 10 m LOA) and by sampling the small-scale fishery (for vessels less than 10 m LOA) through an exhaustive sampling survey questionnaire, on sales notes from the official fish market and from direct sales data. The data collected is in line with the EU Data Collection Framework (DCF) EC 199/2008, EC 949/2008, EC 93/2010.

In 2013 Malta submitted data collected within the framework of the DCF to several international bodies / for use by several projects:

- i) Joint Research Centre (JRC) of the European Commission
- ii) International Commission for the Conservation of Atlantic Tunas (ICCAT) through Task I and Task II forms.
- iii) General Fisheries Commission for the Mediterranean (GFCM) including dolphin fish annual reporting form and Task I statistical matrix.
- iv) FAO regional projects MedSudMed, CopeMed
- v) EU horizontal framework project MAREA
- D. Existing databases and synergies with other applications

#### Section 4 - Status of research in progress

A. Fisheries research with emphasis on management oriented assessment and GFCM priority species

Research/project title Duration Main tonic Description

rescaren project ane	Duranon	Main topic	Description
MEDITS		Data collection	Fisheries-independent data for demersal resources.
MEDIAS		Data collection	Fisheries-independent data for pelagic resources.
MESMA		Spatial based	Monitoring and evaluating of spatially managed marine areas
		approach	
CREAM		EAF	Coordinating research in support to application of EAF
			(Ecosystem Approach to Fisheries) and management advice
			in the Mediterranean and Black Seas.
GAP		Sensitive	Bridging the gap between fisheries scientists and fishers -
		habitats	nursery and spawning ground of commercially important
			demersal species within the Malta FMZ were identified.
STOCKMED		Bibliographic	Literature review conducted on Octopus vulgaris, Eledone
		review	cirrhosa, Eledone moscata and Galeus melastomus and
			compilation fishing grounds' maps of the Maltese trawling
			fleet.

#### B. Socio-economic studies of fishing communities and fishing sector

Research/project title	Duration	Main topic	Description

#### C. Marine environment studies

Research/project title	Duration	Main topic	Description
LIFE + BAĦAR	2013-?	Benthic habitats	Collection of data on the location of 4 habitats (Posidonia
			beds, sandbanks, reefs and submerged or partially submerged
			caves) within the 25 nm Malta FMZ under the Habitats
			Directive in order to protect them by creating NATURA 2000
			sites.

#### Section 5 - Involvement in activities of FAO regional projects

A. Description of activities carried out with FAO regional projects, results obtained and assistance received In 2013, Malta participated in two meetings held within the MedSudMed project. These include the 11<sup>th</sup> Coordination Committee Meeting (23-24 April 2013, Sliema, Malta) and the FAO-MedSudMed and CopeMed II Working Group on Demersal Fishery Resources (Gammarth, Tunisia, 23-27 September 2013).

#### Section 6 - Management measures

A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects

#### Section 7 - Environment protection measures

- A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)
  - Restricted area between 'Ponta ta' l-Ahrax' and 'Dahlet ix-Xilep: (Notice to Mariners No 2 of 2010) The purpose of this environment protection measure is to protect the Yelkouan Shearwaters (Garnija) seabirds that breed on cliffs. Implementation of this measure is held between 1<sup>st</sup> February and 30<sup>th</sup> July every year, applicable 2 hours before sunset till 2 hours after sunrise.

#### Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

#### A. By-catch events

Efforts are being made to include the collection of this data through electronic logbooks.

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

Efforts are being made to include the collection of this data through electronic logbooks.

#### **Montenegro**

#### **Section 1 - Description of fisheries**

A. Fishing grounds (GSAs): 18B. Total landings: 623 tonnes (2012);

**C.** Fleet: 117 vessels (2013); 112 vessels (2012)

Sect	Section 2 - Status of stocks of priority species									
	Species/Stock	Ref. year	Stock status	GSA	Presented to GFCM WGs?	Presented to any other forum?				
	Merluccius merluccius		in high overfishing	18	Y Y	other forum:				
	Parapenaeus longirostris		in high overfishing	18	Y					

#### Section 3 - Status of statistics and information system

- **A.** Description of the national system of fishery statistics and/or any improvement/change occurred Fisheries Information System (FIS). At present FIS is not fully operating, because of ongoing system updates.
- B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects

The software ATrIs (Adriamed Trawl Survey Information System), provided by the FAO AdriaMed project, was used for data input gathered during MEDITS campaigns and for processing.

- C. Type of data collected, transmission to GFCM Secretariat and other international bodies

  Vessel register; Logbook & landings declaration; Monthly report for vessels under 10m LOA; Licenses

  management sub-system; Common alarm system; VMS Vessels over 10m LOA; In the programming fase are:

  Fishermen register; Electronic logbook; Sales notes; Bilogical and sampling data; GFCM Task 1 report.
- **D.** Existing databases and synergies with other applications

#### Section 4 - Status of research in progress

A. Fisheries research with emphasis on management oriented assessment and GFCM priority species

Research/project title	Duration	Main topic	Description
MEDIAS		Biological	Biomass estimation of small pelagic species in GSA 18 using
		sampling	DEPM and Acoustic methods.
MEDITS		Biological	Biomass estimation of demersal resources.
		sampling	
HERD SEAMED	2012-2014	Fisheries	Strengthening education, applied research and marine
		development	development in West-Balkan.
MORM-MONT	2012-2014	Fisheries	Monitoring of coastal fisheries and fish fry composition along
		development	the Montenegrin coast, with the aim of conservation and
			sustainable management of marine fisheries.

B. Socio-economic studies of fishing communities and fishing sector

Research/project title	Duration	Main topic	Description
MAREA SEDAF	2013- ?	Socio-economic	Improve knowledge of the main socio-economic aspects
		data	related to the most important fisheries in the Adriatic Sea.

C. Marine environment studies

	Research/project title	Duration	Main topic	Description
	CAMP		Coastal	Coastal Area Management Programme
			ecosystems	
	PPPOP			Special Plan for the Coastal Area of Montenegro

#### Section 5 - Involvement in activities of FAO regional projects

A. Description of activities carried out with FAO regional projects, results obtained and assistance received

#### **Section 6 - Management measures**

- A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects
  - Rulebook on determining the line where the water ceases to be steady salty in rivers flowing into the sea and defining the boundaries of fishing protected areas ('Official Gazette MNE' no 39/13)
  - Rulebook on form of the permit, method of payment of fees, form, content and method of keeping the register of permits for mariculture ('Official Gazette MNE' no 39/13)
  - Rulebook on the type of satellite monitoring system of fishing vessels and type of fishing vessels for which the system is established ('Official Gazette MNE' no 39/13)

#### Section 7 - Environment protection measures

# A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

Katić MPA. Establishment of the MPA zones, along with protected land areas are of great importance for the diversity of plants, animals, and natural habitats represent an effective tool for providing permanent protection and wise use of natural resources. By 2015, "Katić" MPA will be set up and it will be considered as an operational model for the development of a national system of MPAs in Montenegro

#### Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

#### A. By-catch events

No incidental catches of cetaceans have been reported.

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

Currently being considered for integration of the legal acts.

#### Morocco

#### Section 1 - Description of fisheries

A. Fishing grounds (GSAs): 03

**B.** Total landings: 35 937 tonnes (2012); 31 711 tonnes (2011)

**C.** Fleet: 3 437 vessels (2012); 3 403 vessels (2011)

Sect	Section 2 - Status of stocks of priority species									
	Species/Stock	Ref. year	Stock status GSA		Presented to	Presented to any				
				GFCM WGs?	other forum?					
	Merluccius merluccius	2012	in overexploitation and overfished	03	$\mathbf{Y}^2$					
	Sardina plichardus	2012	fully exploited	03	$\mathbf{Y}^{1}$					

#### Section 3 - Status of statistics and information system

- A. Description of the national system of fishery statistics and/or any improvement/change occurred

  Le système statistique marocain est un système qui gère la collecte de données sur les pêcheries à travers trois
  établissements l'Office national des pêches (ONP), le Département des Pêches Maritimes (DPM) et l'Institut
  National de Recherche Halieutique (INRH)
- B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects
- C. Type of data collected, transmission to GFCM Secretariat and other international bodies
  Les données transmises à la CGPM sont gérées de la manière suivante : Base de données Registre de Flottille ;
  Base de données des bateaux autorisés pour la pêche et ayant une taille supérieure à 15 m ; Base de données « Task 1 »
- D. Existing databases and synergies with other applications

#### Section 4 - Status of research in progress

A. Fisheries research with emphasis on management oriented assessment and GFCM priority species

Research/project title	Duration	Main topic	Description
		Stock assessment	Évaluations des stocks des principales espèces
		Fish biology	Études des cycles de vie des espèces à haute valeur
			commerciale
			Études de l'interaction entre l'activité de pêche et son
			environnement
			Recherches sur la révision des tailles marchandes des
			principales espèces exploitées

B. Socio-economic studies of fishing communities and fishing sector

Research/project title	Duration	Main topic	Description
		Bio-economy	Modélisation bioéconomique sur la pêcherie sardinière
		Small-scale	Analyse socioéconomique du secteur de la pêcherie artisanale
		fisheries	
		Coastal fisheries	Etude sur la rentabilité économique de la pêche côtière

C. Marine environment studies

Research/project title	Duration	Main topic	Description
		Elasmobranchs	Etudes sur l'inventaire des espèces des Elasmobranches
			peuplant la méditerranée marocaine.
		Cetaceans	Etude des interactions entre les Cétacés et la pêche.
		MPAs, artificial	Etude de l'impact de la mise en place de nouvelles mesures de
		reefs	gestion, telle que l'implantation des aires marines protégées,
			l'immersion des récifs artificiels et autres.
		Environmental	État de la salubrité du milieu marin (études chimiques,
		status	accumulation des biotoxines dans les bivalves, études
			microbiologiques).
		Environmental	Effet des facteurs environnementaux (principalement la
		parameters	salinité et la température) sur la biologie et le cycle de vie des
			espèces pélagiques et des espèces demersales à durée de vie
			courte (crevette rose du large).

#### Section 5 - Involvement in activities of FAO regional projects

A. Description of activities carried out with FAO regional projects, results obtained and assistance received

#### **Section 6 - Management measures**

-

 $<sup>^{2}\,</sup>$  not validated by the GFCM Working Group

# A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects

- Limitation de la taille des espèces pêchées dans les eaux marocaines;
- Limitation de l'effort de pêche: les investissements en matière de nouvelle construction navale ont été suspendus depuis 1992 (gel d'investissement);
- Le contrôle strict des activités de pêche de long de la chaîne de valeur et l'application d'une procédure de certification et traçabilité des captures depuis janvier 2010;
- La mise en place depuis octobre 2011 de système de suivi et de transmission de données par satellite (VMS) à bord des navires ayant un tonnage supérieur à 2 unités de jauge brute. (Décret n°2-09-674 du 17 mars 2010);
- Plan d'aménagement de la pêcherie crevettière (depuis 2012);
- Plan de gestion du thon rouge selon les recommandations ICCAT;
- Plan d'aménagement de l'espadon (Arrêté n°1666-12 du 17 avril 2012, et l'Arrêté n°1176-13 du 08 avril 2013);
- Plan d'aménagement des espèces littorales (algues, corail rouge, coquillages, etc) (Arrêté n°955-10 du 15 mai 2006) :
- Plan d'aménagement du poulpe depuis juillet 2011;
- Projet de plan d'aménagement de la pêcherie des petits pélagiques prévus en 2014 ;
- Publication de la loi 19-07 interdisant les filets maillants dérivants et son texte d'application ;
- Plan de conservation des requins ;

#### Section 7 - Environment protection measures

A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

#### Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

#### A. By-catch events

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

# A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

Species	N specimen	Weight (tonnes)	Day/month/year	Fleet segment	Gear	GSA	N Retained for sale	N discarded dead	N released alive
Galeorhinus galeus		6	2011			03			
Galeorhinus galeus		2	2012			03			
Other		87	2010			03			
Other		61	2011			03			
Other		177	2012			03			

- L'identification et la cartographie des zones de ponte et de nourriceries des principales espèces exploitées.
- L'identification de toutes les espèces des Elasmobranches peuplant la GSA 03.
- L'étude de l'effet des changements climatiques sur l'écosystème marin et sur la biodiversité dans le GSA 03.
- L'étude de l'effet des facteurs environnementaux sur les cycles biologiques de toutes les espèces au niveau de la GSA 03.
- L'adoption de modèles intégrant l'effet des changements globaux et des facteurs environnementaux pour l'évaluation de l'état des stocks exploitées.

Coordinating research in support to application of EAF

in the Mediterranean and Black Seas.

(Ecosystem Approach to Fisheries) and management advice

#### Romania

#### Section 1 - Description of fisheries

A. Fishing grounds (GSAs): 29

**B.** Total landings: 835 tonnes (2012); 568 tonnes (2011)

**C.** Fleet: 261 (2012); 488 (2011)

#### Section 2 - Status of stocks of priority species

Species/Stock Ref. year Stock status GSA Presented to any GFCM WGs? other forum?

#### Section 3 - Status of statistics and information system

- **A.** Description of the national system of fishery statistics and/or any improvement/change occurred
  Fisheries data obtained in the different projects by National Institute for Marine Research and Development
  (NIMRD) are incorporated in database of institute. Reports and data are transmitted to Romanian NAFA in the
  frame of National Data Collection Program, NAFA/EC-DG Mare.
- B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects
- C. Type of data collected, transmission to GFCM Secretariat and other international bodies
- D. Existing databases and synergies with other applications

#### Section 4 - Status of research in progress

A. Fisheries research with emphasis on management oriented assessment and GFCM priority species

 Research/project title
 Duration
 Main topic
 Description

 PN 09320206
 Reducing the impact of marine bio-resources exploitation by developing eco-efficient solutions.

 PN II - Capacity, Module III
 EAF
 Investigation and applied studies of the ecosystem approach to fishery in the Ionian Sea (Greece) and Black Sea (Romania) Romania-Greece bilateral cooperation.

 SRCSSMBSF
 Strengthening the regional capacity to support the sustainable management of the Black Sea Fisheries.

EAF

B. Socio-economic studies of fishing communities and fishing sector Research/project title Duration Main topic Description

C. Marine environment studies

CREAM

**Duration** Research/project title Main topic Description FP7 EU MISIS Environmental Environmental monitoring of the Black Sea Basin and a common European framework programme for the status development of the Black Sea region. PN 09320103 Influence of river contribution on the chemical composition and trophic status of Romanian transitional and coastal waters to joint implement the Water Framework Directives and Marine Strategy. PN 09320202 Marine Characterization of the benthic and planktonic communities biodiversity on the Romanian continental shelf. RACE Radiation background of Black Sea coastal environment Coastal environment MARCY Algal blooms Molecular approaches for rapid and quantitative detection of cyanobacteria and their toxins from coastal Black Sea. **ECOMAGIS** GIS tools Implementation of a complex GIS for Ecosystem-based Management, through integrated monitoring and assessment of the biocoenosis status and its evolution trends in the fast changing environment. **ODEMM** Ecosystem-based Options for Delivering Ecosystem-based of marine management management COCONET FP7 Towards networks of marine protected areas (from the shore MPAs. renewable to the high and deep sea), coupled with sea-based wind energy potential. energy PERSEUS FP7 Policy-oriented marine Environmental Research for the Southern European Seas.

A. Description of activities carried out with FAO regional projects, results obtained and assistance received So far, FAO has not developed any Black Sea Regional Project.

#### Section 6 - Management measures

A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects

#### Section 7 - Environment protection measures

- A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)
  - Obtaining the updated information to expand the European ecological network Natura 2000 (Special Areas of Conservation) in the Romanian marine

#### Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

A. By-c	A. By-catch events									
Species	N specimen	Day/month/year	Vessels' type	Gear	GSA or statistical grid	Main target species	N discarded dead	N released alive	N unknown	
Phocoena phocoena	0	2012								
Delphinus delphis	0	2012								
Tursiops truncatus	0	2012								

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

Species	Annex	N	Weight	Day/month/year	Vessels' type	Gear	GSA	Retained	N discarded	N released
		specimen	(tonnes)					for sale?	dead	alive
Squalus acanthias	III		20	2012			29	Y		

#### Section 10 - Proposals for future research programmes

- Distribution and abundance of the two main species in the Black Sea: turbot and dogfish.

#### Slovenia

#### Section 1 - Description of fisheries

A. Fishing grounds (GSAs): 17

**B.** Total landings: 238 tonnes (2013); 329 tonnes (2012)

C. Fleet: 170 vessels (01/01/2014); 175 vessels (01/01/2013)

Sect	Section 2 - Status of stocks of priority species									
	Species/Stock	Ref. year	Stock status GSA		Presented to GFCM WGs?	Presented to any other forum?				
	Engraulis encrasicolus		in overexploitation and overfished	17	Y					
	Sardina plichardus			17	Y					

#### Section 3 - Status of statistics and information system

- A. Description of the national system of fishery statistics and/or any improvement/change occurred InfoRib is the main system.
- B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects
- C. Type of data collected, transmission to GFCM Secretariat and other international bodies
  InfoRib is the centralized information system which contains all the relevant data on fisheries in Slovenia: Fleet vessel register, Logbooks, Fishing Permits, Socio-economic data, Reporting, Sampling, Technical indicators, Code lists First sale, Aquaculture, Processing Industry and Meetings Module. Biological Sampling Module is permanently stored in the Fisheries Research Institute database (BIOS).
- **D.** Existing databases and synergies with other applications

  InfoRib is interconnected with VMS data base and soon it will be interconnected also with ESR data. In the future the interconnection with the Aquaspec system, with the BIOS database and with the central node for fisheries data at the European Commission will be improved.

#### Section 4 - Status of research in progress

A. Fisheries research with emphasis on management oriented assessment and GFCM priority species

Research/project title	Duration	Main topic	Description
MEDITS		Biological sampling	Collection and management of data
MEDIAS		Biological sampling	Collection and management of data
SOLEMON			

B. Socio-economic studies of fishing communities and fishing sector

Research/project une	Durauon	Main topic	Description
		Economy	Evaluation of the fishing sector
		Economy	Evaluation of the economic situation of the aquaculture sector
		Economy	Evaluation of the economic situation of the processing industry

C. Marine environment studies

Research/project title Duration Main topic Description

#### Section 5 - Involvement in activities of FAO regional projects

- A. Description of activities carried out with FAO regional projects, results obtained and assistance received AdriaMed project:
  - stock assessment
  - cooperation in the framework of SOLEMON project

#### Section 6 - Management measures

A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects

GFCM/37/2013/1 on a multiannual management plan for fisheries on small pelagic stocks in the GFCM-GSA 17 (Northern Adriatic Sea) and on transitional conservation measures for fisheries on small pelagic stocks in GSA 18 (Southern Adriatic Sea) (hereinafter: "Multiannual plan"):

In line with the provisions of the "Multiannual plan", Slovenia prepared and sent to the GFCM secretariat, before the end of October 2013, its national Monitoring and control plan for its fisheries targeting small pelagic stocks. In addition, Slovenia submitted to the GFCM secretariat also a list of the vessels authorized to fish for small pelagic stocks that are registered in harbors located in GSA 17.

#### Section 7 - Environment protection measures

A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

A. By-catch events

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

#### Section 10 - Proposals for future research programmes

- Conduct a preliminary survey to determine the spatial and seasonal distribution of planktonic stages of European anchovy and sardine in the Slovenian seas. This would enable us to determine the appropriate number and position of sampling stations and the period in which to collect the samples for the DEPM. Addition of this data to the joint stock assessment would further improve the precision of the results.

#### Spain

#### **Section 1 - Description of fisheries**

**A.** Fishing grounds (GSAs): 01, 02, 05, 06, 07

**B.** Total landings: 59 703 tonnes (2012); 60 031 tonnes (2011)

**C.** Fleet: 2 843 vessels (31/12/2012); 2 972 vessels (31/12/2011)

ction 2 - Status of stocks of priority species						
Species/Stock	Ref. year	Stock status	GSA	Presented to GFCM WGs?	Presented to any other forum?	
Merluccius merluccius	2012	in high overfishing	01	Y		
Aristeus antennatus	2012	in high overfishing	05	Y		
M. merluccius	2012	in high overfishing	05	Y		
Mullus surmuletus	2012	in high overfishing	05	Y		
M. barbatus	2012	in high overfishing	05	Y		
Parapenaeus longirostris	2012	low overfishing	05	Y		
M. barbatus	2012	in high overfishing	06	Y		
P. longirostris	2012	high overfishing status	06	Y		
Merluccius merluccius	2012	high overfishing status	07	Y		
Mullus barbatus 2012		high overfishing status	07	Y		
Engraulis encrasicolus	2012	uncertain	01	Y		
Sardina pilchardus	2012	sustainably exploited	01	Y		
E. encrasicolus	2012	sustainably exploited	06	Y		
S. pilchardus	2012	overexploited and in overexploitation	06	Y		

#### Section 3 - Status of statistics and information system

- A. Description of the national system of fishery statistics and/or any improvement/change occurred
- B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects
- C. Type of data collected, transmission to GFCM Secretariat and other international bodies
  IEO collects length and biological data of main commercial species under the guidelines of the National Program supported by the EU for the collection and management of fisheries data in accordance with Community programmes (Reg. (EC) 199/2008). Data information is managed in the framework of the SIRENO database developed by the IEO. SIRENO moreover stores fish market information, observers on board information and research surveys data. Moreover, the General Subdirectorate for Statistics collects and processes the economic information on fisheries.
- D. Existing databases and synergies with other applications

#### Section 4 - Status of research in progress

A. Fisheries research with emphasis on management oriented assessment and GFCM priority species			
Research/project title Duration Ma		Main topic	Description
MEDITS		Biological sampling	Collection and management of data
MEDIAS		Biological sampling	Collection and management of data
REMARAN		Management plans	Improve the knowledge of the status of the different stocks
			including aspects of the impact of the fishery in the benthic
			community in order to set up a management plan.
REMALA Spatial ba		Spatial based	Analysis of the adequateness of the Bay of Málaga (GSA01)
		approach	for the creation of a fishing protected area, due to its
			importance as areas of reproduction, spawning, nursery and
			growth of several commercial species.

B. Socio-economic studies of fishing communities and fishing sector Research/project title Duration Main topic Description

#### C. Marine environment studies

Research/project title	Duration	Main topic	Description
TROFOALBORAN		Pelagic ecosystem	Pelagic ecosystem trophic web dynamics influencing the early
			life stages of sardine and anchovy off their main nursery
			grounds in the Bays of Málaga and Almería.
	2011-2013	MPAs/Spill-over	Effects of Marine Protected Areas (MPAs) on exploited
		effects	communities, species and artisanal fisheries have been
			continued, quantifying benefits of spill-over to adjacent
			fisheries and increased reproductive potential at regional level
			as a result the MPA protection.
Azimut CENIT		Renewable energy	Study the offshore wind farms OWF impacts on marine biota.
COCONET FP7		MPAs, renewable	Towards networks of marine protected areas (from the shore
		energy	to the high and deep sea), coupled with sea-based wind
			energy potential.

INDEMARES	2009-2014	Sea habitats of	Promote research, conservation and assessment of the sea and
		special importance	its habitats in order to comply with commitments regarding
			the Marine European Natura 2000 network and reinforce the
			application of international conventions on the sea (as
			OSPAR and Barcelona).

#### Section 5 - Involvement in activities of FAO regional projects

A. Description of activities carried out with FAO regional projects, results obtained and assistance received

#### Section 6 - Management measures

A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects

Regarding Red Coral, national regulation has been modified and adapted to the last GFCM Recommendations through Royal Decree 629/2013.

#### Section 7 - Environment protection measures

A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

A. By-catch events

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

#### Section 10 - Proposals for future research programmes

- For the assessment of marine resources much greater attention is needed in taking into ecological considerations for the implementation of ecosystem based approach in fisheries. Studies focusing on the impact of environmental changes (climatic variability, increase of gelatinous plankton, etc.) and on the variability of marine resources, as well as, on their effect on fishing catchability and fleet efficiency are recommended.

#### Tunisia

#### **Section 1 - Description of fisheries**

A. Fishing grounds (GSAs): 12, 13, 14

**B.** Total landings: 117 637 tonnes (2012); 109 160 tonnes (2011)

C. Fleet: 12 000 vessels

#### Section 2 - Status of stocks of priority species

Species/Stock Ref. year Stock status GSA Presented to Presented to any GFCM WGs? other forum?

#### Section 3 - Status of statistics and information system

- A. Description of the national system of fishery statistics and/or any improvement/change occurred la collecte, l'archivage et l'élaboration des bases de données des statistiques de la pêche (production, effort, flottille) sont assurés par les services du Ministère de l'Agriculture, plus particulièrement la Direction Générale de la Pêche et de l'Aquaculture (DGPA).
- B. Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects

  Depuis l'année dernière, la DGPA appuyée par la CopeMedII Projet a lancé une opération pilote de collecte et d'amélioration des données statistiques de la pêche artisanale.
- C. Type of data collected, transmission to GFCM Secretariat and other international bodies
- D. Existing databases and synergies with other applications

#### Section 4 - Status of research in progress

A. Fisheries research with emphasis on management oriented assessment and GFCM priority species

Research/project title	Duration	Main topic	Description
		Stock assessment	Ressources benthiques exploitables des eaux tunisiennes :
			Evaluation des stocks et aménagement des pêcheries.
		Stock assessment	Ressources pélagiques exploitables : Evaluation des stocks et
			aménagement des pêcheries
		Gear selectivity	Amélioration de la sélectivité des engins de pêche
ECOSAFIM		EAF	Approche écosystémique comme outil d'aménagement

B. Socio-economic studies of fishing communities and fishing sector Research/project title Duration Main topic Description

C. Marine environment studies

Research/project title	Duration	Main topic	Description
		Sea turtles	Monitoring du site de nidification des îles Kuriat qui a permis d'enrichir davantage la base des données relative aux paramètres
			de nidification. Un nouveau site de ponte de la tortue marine
			Caretta caretta a été découvert à la Chebba (côtes sud-est de la
			Tunisie) l'été 2013. Des rencontres de sensibilisation des
			pêcheurs ont été organisées dans les ports pour une bonne
			conservation des tortues marines. Des dépliants et livrets ont été
			édités dans le même cadre de conservation.
		Sea turtles	Etude de l'importance et de la répartition spatiotemporelle des
			échouages sur les côtes tunisiennes dans le cadre du réseau
			national d'échouage. Dans le cadre de ce réseau, des
			échantillons sont conservés pour les scientifiques. Ceux-ci ont
			servi en premier temps pour mener des études de génétique
			(caractérisation génétique des populations) et de parasitologie.
		Sharks	Étude systématique (morphologique, anatomique,
		taxonomy	parasitologique et génétique) a mis en évidence la validité d'une
			pastenague Dasyatis tortonesi qui posait un problème de
			confusion avec une autre espèce du même genre Dasyatis
		G1 1 1 1 1	pastinaca.
		Sharks biology	Délimitation des zones de nurseries pour quelques espèces de poissons cartilagineux
		Corals	Campagnes de prospections effectuées ont permis d'établir une
			première liste d'espèces du coralligène au nord de la Tunisie
		Seagrasses	Étude des herbiers de posidonie dans le gouvernorat de Mahdia
			a permis de décrire plusieurs types d'herbiers dont les plus
			répandus sont les herbiers de plaine, mais aussi les herbiers à
			statut particulier, les récifs frangeants et les micro-atolls dans la
			région de La Chebba.
		Climate	Étude de la biodiversité de la faune ichthyologique a été
		change	entamée dans un contexte de changement climatique.
		Cetaceans	Recensement des échouages de cétacés.

#### Section 5 - Involvement in activities of FAO regional projects

A. Description of activities carried out with FAO regional projects, results obtained and assistance received L'INSTM continue régulièrement ses activités de recherche et entretient une collaboration assez étroite avec les deux projets régionaux MedSudMed et CopeMedII.

#### **Section 6 - Management measures**

- A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects
  - Fermeture au chalut sur la région Sud (GSA 14 Golfe de Gabès) pour un période de trois mois (1 juillet au 30 Septembre).

#### **Section 7 - Environment protection measures**

A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

#### Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

A. By-catch events

Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

Species N Weight Day/month/year Fleet Gear GSA N N N released segment segment Fleet Gear GSA N N N released discarded alive for sale

- L'identification et la cartographie des zones de ponte et de nourriceries des principales espèces exploitées.
- L'identification de toutes les espèces des Elasmobranches peuplant la GSA 03.
- L'étude de l'effet des changements climatiques sur l'écosystème marin et sur la biodiversité dans le GSA 03.
- L'étude de l'effet des facteurs environnementaux sur les cycles biologiques de toutes les espèces au niveau de la GSA 03.
- L'adoption de modèles intégrant l'effet des changements globaux et des facteurs environnementaux pour l'évaluation de l'état des stocks exploitées.

#### **Turkey**

#### Section 1 - Description of fisheries

- **A.** Fishing grounds (GSAs): 28, 29, 22, 24
- **B.** Total landings: 396 322 tonnes (2012); 477 658 tonnes (2011)
- **C.** Fleet: 17 165 vessels (2011)

#### Section 2 - Status of stocks of priority species

Species/Stock Ref. year Stock status GSA Presented to Presented to any GFCM WGs? other forum?

#### Section 3 - Status of statistics and information system

- A. Description of the national system of fishery statistics and/or any improvement/change occurred
- **B.** Indicate whether or not progress in activities related to the collection and processing of fishery statistics have been done with the assistance of FAO regional projects
- C. Type of data collected, transmission to GFCM Secretariat and other international bodies
- D. Existing databases and synergies with other applications

The Fisheries Information System (FIS), an integrated Web-based database, has been developed. FIS is subject to routine updates, comprises a combination of resources organized to collect, process, transmit, and disseminate fisheries relevant data.

#### Section 4 - Status of research in progress

Α.	Fisheries research v	vith emphasis on	management	oriented assessment and GFCM priority species
Res	earch/project title	Duration	Main tonic	Description

#### B. Socio-economic studies of fishing communities and fishing sector

Research/project title Duration Main topic Description

#### C. Marine environment studies

Research/project title	Duration	Main topic	Description
"Strengthening Protected		MPAs	The project aims to facilitate expansion of the national system
Area Network of Turkey:			of marine and coastal protected areas, including fisheries
Catalyzing Sustainability of			protected areas, and improve their management effectiveness.
Marine and Coastal Protected			
Areas"			

#### Section 5 - Involvement in activities of FAO regional projects

A. Description of activities carried out with FAO regional projects, results obtained and assistance received

#### Section 6 - Management measures

- A. Description of the management measures (legislation, regulations, etc) taken in direct response to GFCM recommendations including assessment of their effects
  - Notification regulating commercial fisheries has been revised for 2012-2016 fishing season
  - Minimum size restrictions have been enhanced for some species
  - Prohibitions for use of some fishing gear and for some fishing zones have been introduced
  - No fishing activity for turbot shall be permitted from 15 April to 15 June. The minimum landing size for turbot shall be 45 cm total length. The minimum legal mesh size for bottom-set nets used to catch turbot shall be 400 mm

#### **Section 7 - Environment protection measures**

A. Description of recent activities in establishing protected areas (e.g. fishing reserves, MPAs, and other spatial restrictions)

#### Section 8 - Recommendation GFCM/36/2012/2 on mitigation of incidental catches of cetaceans in the GFCM area

A. By-catch events

# Section 9 - Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area

A. Catch data, incidental taking, release and/or discarding events for sharks species listed either in Annex II or III of the SPA/BD Protocol

#### Section 10 - Proposals for future research programmes

- None