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



GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN

SCIENTIFIC ADVISORY COMMITTEE (SAC)

Thirteenth Session

Marseille, France, 7-11 February 2011

SALIENT RESEARCH ACTIVITIES IN MEMBER COUNTRIES

INTRODUCTION

1. This document provides a synthesis of the information contained in 16 national reports received by the Secretariat up to 27th January 2011. It covers, in particular, the 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 was analyzed and summarized in tabular format by the Secretariat as given in Annex 1.

2. This document, together with the respective national reports, is intended to help Members identify opportunities for regional cooperation in research activities and management processes.

GENERAL COMMENTS

3. From the information reviewed, the following principal observations have been deduced:

- National reports generally focus on updates in national statistical systems, progress in research and scientific activities, stock assessments and management measures implemented during the intersessional period.
- Some national reports provided very few updates on those of previous years.
- Significant increases in fleet sizes and production in some countries has been noted.
- More detailed reporting on the status and monitoring of stocks by some countries has been observed and efforts by certain countries to develop stock assessment programmes have been noted.
- European Union countries have continued to develop their fisheries data collection programme in line with the EU Data Collection Framework.
- Several of the reporting countries conduct surveys-at sea, with MEDITS and MEDIAS being the most common surveys.

- Data collection, statistics and the management of national databases have been described in detail by several countries and some have addressed the importance and efforts being made to submit data to the GFCM in the required standards and formats.
- Almost all countries have reported on fisheries research projects in progress and a vast amount are being conducted in some of the countries. These mainly focus on fish population dynamics, fish stock assessment, nursery and spawning areas, fishing gear selectivity, bio-economic modeling, by-catch and discards, conservation, recreational fisheries, seafood quality and hygiene, sustainable fishing practices and genetics.
- Besides fisheries-related research, a wide variety of research activities have been reported and include projects on alien species, invasive algal species, biodiversity, marine ecology, eutrophication, oceanography, endangered species, marine protected areas, ecosystem-based governance, integrated coastal zone management, marine conservation, reduction of by-catch of non-commercial species and marine pollution.
- An increase in the development of socio-economic data collection schemes was observed and some targeted projects are being conducted.
- Most countries reported on the implementation of management measures albeit in various degrees of detail.
- Suggestions for research put forward by the reporting countries include subjects related to EAF, fishing gear technology, ecology, monitoring of specific fisheries resources, socio-economic studies, coastal zone management, population dynamics, genetics, stock-recruitment interactions, essential fish habitats, climate change and other environmental impacts on fisheries, spatial management of fisheries, bio-economic modeling, reference points and indicators, artisanal fisheries, invasive species, biodiversity and taxonomy.

Suggested action by the Committee

4. 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.

Annex 1. Summary table of National Reports

| Member Country | Description of the fisheries | Status of stocks of priority species | Status of the statistics and information system | Status of research in progress | Status of the social sciences studies in progress | Marine environmental studies in progress | National management measures | Research suggestions for consideration by SAC |
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| Algeria | <ul style="list-style-type: none"> ▪ Fleet: about 4,500 vessels; ▪ Production (2009): over 133,000 tonnes | <ul style="list-style-type: none"> ▪ Assessment surveys for commercially important species will take place in 2011. | <ul style="list-style-type: none"> ▪ National statistical scheme covers landing sites for marine fisheries. ▪ Catch and effort data for marine fisheries as well as data on inland fisheries and aquaculture are collected. ▪ An access-based national database is in place. | <ul style="list-style-type: none"> ▪ Main research objectives focus on: <ul style="list-style-type: none"> - biological studies of living aquatic resources - assessment and conservation of marine resources - monitoring of fishing effort - improvement and development of aquaculture production systems ▪ Five research domains have been established and several projects will be executed over a period of 24 months. | <ul style="list-style-type: none"> ▪ One of the national research domains established deals with economics, sociology and regulation. | <ul style="list-style-type: none"> ▪ One of the national research domains established deals with coastal ecosystems. ▪ Several research projects are in place and conducted by four national institutions. | <ul style="list-style-type: none"> ▪ Regulations published in 2009-2010: <ul style="list-style-type: none"> - 5 fisheries regulations which include issues related to fishing permits, fishing gears, pêche à pied, owner and crew issues, storage and transport of fishery products, bluefin tuna fishing. ▪ 1 aquaculture regulation relating to conditions for the establishment of aquaculture sites. | <ul style="list-style-type: none"> ▪ Stock assessment and EAF ▪ Fishing gear technology ▪ Physical and chemical variations in the accretionary hard tissues of invertebrates and coralline red algae ▪ Mediterranean aquaculture ▪ Inland aquaculture ▪ Studies on the ecosystems and environmental conditions. |
| Cyprus | <ul style="list-style-type: none"> ▪ Fleet (2008): 540 vessels; ▪ production (2008): 1827 tonnes; ▪ Total working days in 2008: 100,270 ▪ Fleet | <ul style="list-style-type: none"> ▪ Monitoring of demersal and large pelagic species in GSA 25, under the EU Data Collection Framework. ▪ During the 2010 SCSA Working | <ul style="list-style-type: none"> ▪ The Cyprus National Database for the collection and storage of data in the fisheries sector is comprised of the following databases: i).the Data Collection | <ul style="list-style-type: none"> ▪ National Fisheries Data Collection Programme: biological sampling for the evaluation of length and age composition of landings, the estimation of biological parameters (growth, maturity) for a number of species, discards sampling from the bottom otter trawls, | <ul style="list-style-type: none"> ▪ Socio-economic surveys through: Inshore Fishery Production Reports, Logbooks, the Fishing Licences and the Sales Notes, interviews. | <ul style="list-style-type: none"> ▪ Projects on: marine ecology and biodiversity, anthropogenic effects on the marine ecosystem, marine invasive alien species, eutrophication, endangered | <ul style="list-style-type: none"> ▪ The National and Community legislation provides for a number of management measures for the regulation of the Cyprus fisheries | |

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| | operates in GSAs 25 and 26 and international waters of the central and eastern Mediterranean. | Group on Demersal Species the status of the five demersal stocks was evaluated, using LCA – pseudo-cohort and Y/R analysis. | Network System (Data Transmission), ii) the Central Database and iii) the Fishing Vessel Fleet Register (FVR). <ul style="list-style-type: none"> The system comprises a series of sub-databases: Fishing capacity, Fishing effort, Catches (Landings and Discards), Catch per Unit Effort data series, Biological Measurements, Economic data and processing industry. | Medit's trawl survey. <ul style="list-style-type: none"> Project to collect information on the alien species <i>Lagocephalus sceleratus</i> EU Oceanographic research projects | | aquatic species, MPAs, monitoring of environmental parameters, Ecological Quality Status of coastal waters, ecology and monitoring of the environmental parameters of the Larnaca Salt Lake complex and Akrotiri wetlands, implementation of the Water framework Directive and Habitats Directive. | <ul style="list-style-type: none"> DFMR formulated and implements a Fisheries Management Plan for the Cyprus Fleet targeting demersal and mesopelagic stocks in the coastal zone of the Republic of Cyprus ICCAT recommendations on the management of Mediterranean swordfish, the multiannual recovery plan for bluefin tuna and the conservation of thresher sharks, endorsed by GFCM, are implemented. | |
| Croatia | <ul style="list-style-type: none"> Activities in GSAs 17 and 18 Fleet: 3996 units; Production (2009): 55,323 tonnes. | <ul style="list-style-type: none"> Outputs of VPA assessments demonstrated that anchovy and sardine in GSA 17, in relation to their estimated biomass levels | <ul style="list-style-type: none"> Croatian Fishing Fleet Register is an electronically-kept register, now web-based, in which relevant data on vessels and vessel activities are registered. | <ul style="list-style-type: none"> Monitoring of small pelagic stock by acoustic survey (PELTON) and VPA stock assessment Project "DEMMON" Monitoring of commercial demersal (bottom trawl) fisheries Project "MEDITS" | <ul style="list-style-type: none"> One part of socio-economic data gathering is organized through DemMon project. | <ul style="list-style-type: none"> Ecosystem permanent national monitoring project "Systematic exploration of the Adriatic Sea as basis for sustainable | <ul style="list-style-type: none"> All recommendations on bluefin tuna and swordfish in Mediterranean Sea as adopted by ICCAT and GFCM are fully | <ul style="list-style-type: none"> Consideration should be given to international monitoring of demersal resources in Jabuka Pit. Continue with the activities in the framework |

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| | | <p>in 2009, can be considered as moderately exploited.</p> <ul style="list-style-type: none"> ▪(Solea solea) stock in GSA 17 is overfished. ▪Long-term trends in biomass index in Croatian fishing sea shows high fluctuation with negative changes in 2009 for the most important stocks as hake and Norway lobster. | <ul style="list-style-type: none"> ▪Fishing vessels equal to or longer than 10 m have to keep and submit a logbook reporting data on catch and landings; ▪All sales data are reported via a web-based application in an electronic form. | <p>Mediterranean International Bottom Trawl Survey</p> <ul style="list-style-type: none"> ▪Project "SOLEMON" Evaluation of stock of Common Sole (<i>Solea solea</i>) and other flatfish in the Adriatic sea ▪Project "DEEP SEA" ▪Project "UWTV Survey" | | <p>resources management".</p> <ul style="list-style-type: none"> ▪Monitoring of fishery resources (both pelagic and demersal) also provide environmental data related to the marine ecosystems. | <p>incorporated in Croatian legislation and have been implemented in the inter-sessional period.</p> | <p>of Adriamed.</p> |
| Egypt | <ul style="list-style-type: none"> ▪Fleet: motorised – 2977 vessels; sail - 1,418 vessels ▪Production (2009): 78,790 tonnes | <ul style="list-style-type: none"> ▪<i>Diplodus vulgaris</i> in Abu Qir Bay did not reach the limit reference point (F_{max}), thus the fisheries of this species considered not overexploited ▪<i>D. sargus</i> reached the target reference point ($F_{0.1}$) but it did not reach the | <ul style="list-style-type: none"> ▪GAFRD collects fisheries data by two methods (Whole survey and Sampling): A system is going to be computerized for registering every fishing unit and the catch data. ▪The statistics collection procedures have recently been upgraded and monitoring. | <ul style="list-style-type: none"> ▪EastMed project ▪A project to improve the Egyptian bottom trawl selectivity and reduce its high percentage by-catch. ▪Stock assessment of single species studies are conducting at different universities and National Institute of Fisheries and Oceanography. | <ul style="list-style-type: none"> ▪Few social or economical studies related to the fisheries are conducted. ▪Study on the risk of the investments in the marine crustaceans fisheries | | <ul style="list-style-type: none"> ▪Freezing of the issuance of additional fishing boat licenses and a closed season for all fishing activities from 1st May to 30th June each year in the Mediterranean Sea. | <ul style="list-style-type: none"> ▪Stock status and exploitation levels for the target pelagic species and some demersal resources of the Egyptian Mediterranean coast. ▪Social and economical studies related to fisheries in Egypt. ▪The effect of |

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| | | <p>limit reference point (F_{max}), thus <i>D. sargus</i> in Abu Qir Bay is not in the overexploited phase</p> <ul style="list-style-type: none"> ▪ <i>Pagellus erythrinus</i>, <i>Merluccius merluccius</i> and <i>Siganus rivulatus</i> are heavily exploited. ▪ <i>Etrumeus teres</i> is under exploited | control and surveillance activities have been improved. | | | | | wide spreading urbanization of the coastal area on fisheries activities. |
| France | <ul style="list-style-type: none"> ▪ Activities in two GSAs: GSA 07 and GSA 08 ▪ 1,172 vessels (GSA 07); 209 vessels (GSA 08) ▪ Production: 14187 tonnes (GSA 07; 10 most important species not including bluefin tuna) | <ul style="list-style-type: none"> ▪ <i>Merluccius merluccius</i> (GSA 07) – growth overexploitation with a risk of recruitment overexploitation. ▪ <i>Mullus barbatus</i> (GSA 07) – slightly overexploited ▪ Sardine and anchovy stock (GSA 07) biomass is lower than in previous years. ▪ A large reduction in | <ul style="list-style-type: none"> ▪ The “Système d’Information Halieutique (SIH)” managed by IFREMER is based on four main data collection schemes – biological sampling of catches, surveys-at-sea, fisheries statistics and economic surveys. ▪ The national fisheries data collection scheme is carried out within the framework of the | <ul style="list-style-type: none"> ▪ SARDONE Project: Studies on anchovy and sardine stocks in the north-western Mediterranean, Adriatic and Aegean. ▪ AMPED project: Marine Protected Areas for highly migratory species ▪ Project on bio-economic studies to contribute to the fisheries management process ▪ Bluefin tuna research ▪ IPEP Project: impact of fisheries on protected species ▪ Regional research on Mediterranean sharks ▪ Selectivity studies on | | | | |

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| | | bluefin tuna catches by the French fleet is coherent with the recovery plan set by ICCAT. | Data Collection framework of the EU. | gangui gear <ul style="list-style-type: none"> ▪ Implementation of EC regulation 1967/2006 by French fisheries | | | | |
| Greece | <ul style="list-style-type: none"> ▪ Fleet: 17,280 vessels; ▪ production 81,530 tonnes | <ul style="list-style-type: none"> ▪ GSA 22: Anchovy stock is fully exploited; ▪ The exploitation rate of the stock of sardine produces high fishing mortality and the stock abundance was estimated as intermediate. | <ul style="list-style-type: none"> ▪ Fishery statistical data are collected by Administration under various Ministries. | <ul style="list-style-type: none"> ▪ Developing fisheries management indicators and targets (DEFILNET MARIFISH) ▪ Bycatch and Discards: Management indicators, trends and location (BADMINTON) ▪ 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 (Coral FISH) ▪ Management & Monitoring Of Deep-sea Fisheries and Stocks (DEEPFISHMAN) ▪ Updating the inventory of Marine Invasive Alien Species across European Seas (MIAS) ▪ Harmonisation of the acoustic data in the Mediterranean 2002-2006 (AcousMed) ▪ Mediterranean halieutic Resources Evaluation | | <ul style="list-style-type: none"> ▪ The 20th Century evolution of Mediterranean exploited demersal resources under increasing fishing disturbance and environmental change (EVOMED) ▪ Monitoring and Evaluation of Spatially Managed Areas (MESMA) ▪ Options for Delivering Ecosystem-based marine management (ODEMM) ▪ People for Ecosystem-based Governance in Assessing Sustainable Development of Ocean and coast (PEGASO) ▪ Mitigating | <ul style="list-style-type: none"> ▪ In addition to EC fisheries management measures, Greece has adopted several national measures for managing fishing effort: minimum landing sizes, fishing gear restrictions, seasonal and local closures, distance from coast and depth restrictions; ▪ Regarding large pelagics, such as bluefin tuna, albacore and swordfish, fishery is regulating by issuing special permits valid for one year; ▪ Seasonal closure for | |

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| | | | | <ul style="list-style-type: none"> and Advice (MAREA) ▪ Assessing the causes and developing measures to prevent the escape of fish from sea-cage aquaculture (PREVENT ESCAPE) ▪ Improving assessment and management of small pelagic species in the Mediterranean (SARDONE) ▪ Judgment And Knowledge in Fisheries Involving Stakeholders (JAKFISH) ▪ Concrete Conservation Actions for the Mediterranean Shag and Audouin's Gull in Greece. ▪ The Structure of Fish Populations and Traceability of Fish and Fish Products (FishPopTrace) ▪ Fishing management study for the province of Kalymnos | | <ul style="list-style-type: none"> adverse ecological impacts of open ocean fisheries (MADE) ▪ Fisheries Study of Kyparissia Bay | <ul style="list-style-type: none"> swordfish from October to January. | |
| Italy | <ul style="list-style-type: none"> ▪ Fleet (2009): 13,301 ▪ Production (2009): 234,000 tonnes | <ul style="list-style-type: none"> ▪ The available information is included in the report of the stock assessment sub-committee. | <ul style="list-style-type: none"> ▪ The production of Italian fisheries statistics is carried out by IREPA on behalf of the Ministry of agriculture and forestry policies and is included in the ISTAT National Statistic Programme. | <ul style="list-style-type: none"> ▪ Fisheries data have been collected in the framework of the Italian National Data Collection Program, according to the legal European Union framework put in place in 2008. ▪ Development of a net (ITAFISHNET) for the exchange of | <ul style="list-style-type: none"> ▪ Cooperation development in the Mediterranean fishery sector – the labour context, the producers associations, training. | <ul style="list-style-type: none"> ▪ Spatio-temporal identification of nursery area in the Italian seas ▪ Guidelines and technical measures for the management of Fishery Restricted Areas ▪ Fishery and marine pollution: | <ul style="list-style-type: none"> ▪ Technical measures were adopted in order to ensure exploitation and conservation of living aquatic resources or the protection of marine | <ul style="list-style-type: none"> ▪ Suggestions include research / studies on: population dynamics and genetics, data collection methods, EAF, oceanography – fisheries interactions, |

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| | | | <ul style="list-style-type: none"> ▪ Statistics are produced on the basis of a sample of national fishing fleet, yearly updated, and their reliability is guaranteed by specific validation software. | <p>information between national researchers</p> <ul style="list-style-type: none"> ▪ Development of the System GIS-PESCA on the entire coastline ▪ Assessment of by-catch of protected species in the pelagic trawl ▪ Concerted Action for the identification of scientific inputs for the development of organic aquaculture in Italy; ▪ Strategies for the commercial exploitation of the Adriatic bluefish. Networks and relations with the territory; ▪ Study for the detection of integrated tools for the sustainable development of the Italian Fishery following the entry into force of Reg. (CE) 1967/2006 and the application of national management plans. ▪ Spatio-temporal identification of nursery area in the Italian seas; ▪ Guidelines and technical measures for the management of Fishery Restricted Areas; ▪ Seafood quality and safety ▪ Recreational fishery ▪ Bio-economic models | | <p>studies on the effects of pollutants on marine fishery</p> | <p>ecosystems.</p> <ul style="list-style-type: none"> ▪ Fishing activities (<i>i.e.</i> trawlers) have been temporarily banned. ▪ Biological stop changed among regions in order to improve the marine environment and to avoid to the depletion of certain stocks ▪ In 2009 - Adjustment plans of Fishing Effort in order to achieve a sustainable balance between capacity and resources. | <p>revision of GSA boundaries, stock-recruitment interactions, spawning areas and essential fish habitats, echo surveys, climate change effects on fisheries, spatial management measures, bio-economic models, reference points and indicators for EAF.</p> |

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| | | | | <ul style="list-style-type: none"> Large pelagic stock assessment | | | | |
| Lebanon | <ul style="list-style-type: none"> Fleet :2,662 vessels Vessels operate in GSA 27 | <ul style="list-style-type: none"> Not available. | <ul style="list-style-type: none"> University of Balamand (IOE-UOB) has been collecting commercial fisheries data in the Mohafaza (district) of North Lebanon and Akkar on a regular basis since August 2005. Data is entered into a software application FLOUCA - Fish Landing Operational Utility for Catch Assessment | <ul style="list-style-type: none"> Biology and ecology of Lessepsian species along the Lebanese coast Detection of heavy metals in bivalve shellfish in Koumba/ Selaata region, North Lebanon Monitoring of the Lebanese coastal water - Bacteriological water quality | | <ul style="list-style-type: none"> Integrated Management of East Mediterranean Coastline (IMAC) project UNDP early recovery of NBC surrounding municipalities' project People for Ecosystem-based Governance in Assessing Sustainable Development of Ocean and Coast (PEGASO) | <ul style="list-style-type: none"> Minister Decision 346/1 on 15/7/2010 regarding organization and specification of marine fishing gear. | <ul style="list-style-type: none"> Developing an "information system" for artisanal fisheries Stock assessment of the commercial fish species in Lebanon Monitoring of invasive species in the Lebanese waters and their population dynamics Impact of invasive species on the coastal marine ecosystem Update of the fish biodiversity richness in the Lebanese territorial waters Monitoring of marine macro-algae in the perspective of climate change |
| Libya | <ul style="list-style-type: none"> Fleet: 5,160 vessels Production: 52,110 | <ul style="list-style-type: none"> Biological study on one of the important | | <ul style="list-style-type: none"> Establishment of a project related to cephalopods species, a biological study of | <ul style="list-style-type: none"> Economics study on prices of commercial fishes and invertebrates in the Tripoli fish | <ul style="list-style-type: none"> Coastal survey of marine turtle nesting activity along the central | <ul style="list-style-type: none"> Announcement of Farwa Lagoon as a marine reserve | <ul style="list-style-type: none"> Marine survey to assess the distribution and abundance of |

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| | tonnes | commercial species <i>Epinephelus marginatus</i> was established at the end of 2009 <ul style="list-style-type: none"> ▪ Assessment study of commercial sponges was conducting in 2009. | | <p><i>Sepia officinalis</i> started in October 2009</p> <ul style="list-style-type: none"> ▪ Study of genetic composition diversity of <i>Mugil</i> sp ▪ Report on data collected during blue fin tuna fishing season (2009) was introduced to the ICCAT ▪ A project on the study of chondrichthyes is being carried out along the coast of Libya. | market was established in June 2009. | <p>and eastern parts of Libya was conducted in summer 2009</p> <ul style="list-style-type: none"> ▪ Microbiological study for some commercial species fished along the coast of Tripoli-Tajura such as <i>Epinephelus</i> sp, <i>Scomber</i> sp, Mullet sp ▪ Study of influence of untreated drainage water on sea water in the western part of Libya was conducted in 2009 ▪ Monitoring study of contamination with hydrocarbons of the marine environment was conducted in Musrata region ▪ A study on the contamination with heavy metals was carried out in selected stations along the coast of Libya with the cooperation with (IFREMER). | <ul style="list-style-type: none"> ▪ Trawl fishing for demersal fish species was prohibited during the period June through July 2009 ▪ In compliance with GFCM recommendati on 2006/2 fishing for dolphin fish is prohibited by law from 1st January to 14th August of each year ▪ Fishing for sponges in Libyan waters is forbidden from 1st November to 30th May of each year and prohibited for the season of 2010. | demersal fishes along the western part of Libya |

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| Malta | <ul style="list-style-type: none"> ▪ Fleet: 2,995 vessels ▪ Total production of main species: 1,294 tonnes | <ul style="list-style-type: none"> ▪ <i>P. longirostris</i> – overexploited in GSA 12-16 ▪ An updated stock assessment was conducted for <i>Thunnus thynnus</i> in 2010, in the framework of ICCAT. | <ul style="list-style-type: none"> ▪ Malta collects data on catch and effort for each segment by species, by quarter and by geographical origin. ▪ Catch figures are based on exhaustive data reported in logbooks (for vessels over 10 m LOA), by sampling the small scale fishery in ports (for vessels under 10 m LOA) and on sales notes from the official fish market ▪ Malta is at present collecting biological data for the 12 species ▪ Fishery independent data is collected as part of the MEDITS international trawl survey and the MEDIAS acoustic survey for small pelagic species ▪ Malta is at present | <ul style="list-style-type: none"> ▪ Stock status of commercially important demersal species ▪ Determination of growth parameters for <i>Coryphaena hippurus</i> ▪ Analysing aspects of the ecology of three demersal elasmobranchs: <i>Scyliorhinus canicula</i>, <i>Galeus melastomus</i> and <i>Raja clavata</i> in the Central Mediterranean ▪ A detailed analysis of ecology and stock status of commercially important cephalopod species with particular reference to <i>Octopus vulgaris</i> | <ul style="list-style-type: none"> ▪ Economic data is being collected per fleet segment on a number of parameters as required for the fulfilment of the EU DCF. ▪ Although fish processing activities are limited, a survey amongst local operators has been carried out since 2006. | <ul style="list-style-type: none"> ▪ Identification and mapping of the spatial distribution of sediment types and biocenoses in GSA 15, including the spatial distribution of sensitive habitats such as maerl beds ▪ Gear alternatives for the artisanal prawn (<i>Palaemon</i> and <i>Processa</i> spp.) beam trawl ▪ The biology of prawns (<i>Palaemon</i> and <i>Processa</i> spp.) targeted by artisanal beam trawls ▪ Genetic analysis of loggerhead turtles (<i>Caretta caretta</i>) from Maltese coastal waters ▪ Genetic analysis of <i>Octopus vulgaris</i> tissue samples from Tunisian, Maltese and Sicilian waters (GSAs 12-16) | <ul style="list-style-type: none"> ▪ Malta implemented the management measures in line with EU regulations, and according to the recommendations by ICCAT and GFCM. | <ul style="list-style-type: none"> ▪ Confirming the taxonomic status of the species <i>Squalus blainvillei</i> in the Mediterranean prior to attempting stock assessments for this species ▪ Further promoting the regional identification of critical habitats (nursery and spawning areas) as well as stock structure for commercially important species throughout the Mediterranean |

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| | | | developing a new Fisheries Information System (FIS) | | | | | |
| Montenegro | <ul style="list-style-type: none"> ▪ Fleet: 213 vessels operating in GSA 18 ▪ As from 2011, 10 more trawlers and 20 purse seiners | <ul style="list-style-type: none"> ▪ Results of the assessments on <i>Merluccius merluccius</i> conducted jointly with Italy and Albania through the Adriamed project were presented at the SCSA assessment working group. ▪ Biomass assessment of small pelagic fish species were performed in all GSA 18 in the framework of the AdriaMed project. | <ul style="list-style-type: none"> ▪ Monitoring and initial activities on setting up of a database on the statistical and information framework has begun in Montenegro. | <ul style="list-style-type: none"> ▪ Activities within the framework of ADRIAMED ▪ Biological samples of twenty commercially important species were taken on a monthly basis from all vessels in three fishing ports ▪ Biology and ecology demersal species - <i>Mullus barbatus</i>, <i>Merluccius merluccius</i>, <i>Parapeaneus longirostris</i> and juvenile stages of <i>Engraulis engrasicolus</i> and <i>Sardina pilchardus</i> in Boka Kotorska Bay ▪ IPA Sustainable Management of Marine Fishery Project ▪ Experiments and adoption of new bivalve molluscs technology for European mussels (<i>Mytilus galloprovincialis</i>) and European oysters (<i>Ostrea edulis</i>). | <ul style="list-style-type: none"> ▪ Description of the achievement and/or progress in activities related to the national research on the socio-economic aspects of the fishing communities and fishing sector. ▪ Under the IPA and AdriaMed projects, collecting of socio-economic data on marine fishery will be continued. | <ul style="list-style-type: none"> ▪ The status and movement of alga <i>Caulerpe racemosa</i> and her influence on ecosystem has been followed on national basis ▪ Under the RAC SPA activities in Montenegro, a preliminary analysis of the sites for protection (MAP) is underway. | <ul style="list-style-type: none"> ▪ The Parliament of Montenegro adopted the Law on Marine Fisheries and Mariculture (Official Gazette No. 56/09) and accompanying rulebooks, on the basis of which commercial fishing advertisement would be published. | |
| Morocco | <ul style="list-style-type: none"> ▪ Fleet: about 600 industrial and 2,700 artisanal vessels ▪ Production: | <ul style="list-style-type: none"> ▪ Overall, <i>Mullus barbatus</i>, <i>Boops boops</i> and <i>Pagellus acarne</i> are overexploited | <ul style="list-style-type: none"> ▪ Three Institutions (INRH, ONP and DPM) are involved in the national statistical system which comprises | <ul style="list-style-type: none"> ▪ Monitoring of the trawl fishery ▪ Monitoring of the hake and octopus fisheries ▪ Monitoring of resources of <i>Mullus barbatus</i>, <i>Pagellus acarne</i>, <i>Boops</i> | <ul style="list-style-type: none"> ▪ Moroccan recreational fisheries in the Mediterranean. ▪ FMD fishing activities ▪ Interactions between cetaceans and fisheries. ▪ Characterisation of | <ul style="list-style-type: none"> ▪ Status of the ecosystem of the Nador lagoon. ▪ Acoustic monitoring of turtles and mammals. | <ul style="list-style-type: none"> ▪ Several fisheries restriction and control regulations are in place. ▪ A new strategy | |

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| | about 40,000 tonnes | <ul style="list-style-type: none"> Small pelagic species: fully exploited | <ul style="list-style-type: none"> biological, statistical and fishing effort data collection. INRH is about to establish a statistical system to include exploitation data together with biological data. | <ul style="list-style-type: none"> <i>boops</i> and <i>Pagellus erythrinus</i>. Study on discards of the trawl fishery Monitoring of the longline fishery Monitoring of the swordfish fishery Study on the biology of octopus Monitoring of the small pelagic fishery Scientific surveys-at-sea | artisanal fisheries in the zone between Jebha and Saïdia. | <ul style="list-style-type: none"> Interaction between <i>Tursiops truncatus</i> and the sardine fishery. Biodiversity studies. Monitoring of threats to cetaceans and marine turtles. | <ul style="list-style-type: none"> of the Fisheries Department (plan HALIEUTIS) has been created consisting of five core components. Seasonal closures for swordfish and octopus. | |
| Slovenia | <ul style="list-style-type: none"> Fleet (in GSA 17): 185 vessels production: 866 tonnes. | <ul style="list-style-type: none"> Sardine (<i>Sardina pilchardus</i>): Moderately exploited Anchovy (<i>Engraulis encrasicolus</i>): moderately exploited | <ul style="list-style-type: none"> Information system InfoRib contains several modules. The modules are stored in a centralized database in the Ministry of Agriculture, Forestry and Food Trying to establish cooperation with MedFisis for the automatization of the GFCM Task 1 report. As soon as the connection between InfoRib and the Module of biological data from the biological database at the Fisheries | <ul style="list-style-type: none"> Slovenia is performing two research surveys at sea: MEDITS and MEDIAS. SOLEMON project (Evaluation of the stock of <i>Solea vulgaris</i> in the Central and Northern Adriatic and estimation of the impact of different gear) | <ul style="list-style-type: none"> Three studies on the basis of Council Regulation (EC) No 199/2008 and of Appendix VI to the Commission Decision: (1) Module of evaluation of the fishing sector; (2) module of the evaluation of the economic situation of the aquaculture sector and (3) module of the evaluation of the economic situation of the processing industry. | <ul style="list-style-type: none"> In October 2010 a 3-year survey, determining biological and ecological characteristics and seasonal dynamics of five commercially important fish species in the Portorož Fisheries Reserve. | <ul style="list-style-type: none"> Management measures in the Slovenian seas follow the Council Regulation (EC) No 1976/2006 which contains principles and rules relating to the conservation and management of the living resources of the seas. Ministry of Agriculture, Forestry and Food on the basis of the expert opinion of Fisheries Research Institute of | <ul style="list-style-type: none"> Support for the 2nd MEDITS trawl survey (i.e. bi-annual) Further development of the SOLEMON project within the framework of the EC DCF. |

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| | | | <p>Research Institute of Slovenia will be made.</p> <ul style="list-style-type: none"> ▪ VMS fully operational since June 2009. | | | | <p>Slovenia temporary stopped issuing new fishing permits for trawlers.</p> <ul style="list-style-type: none"> ▪ In May 2008 Slovenia adopted the regulation on monitoring of catches and selling of fisheries products. | |
| Spain | <ul style="list-style-type: none"> ▪ Fleet: Operates mainly in 4 GSAs ▪ Fleet (2009): 3260 vessels; ▪ Production of main species: 42,435 tonnes. | <ul style="list-style-type: none"> ▪ GSA 01 – <i>Engraulis encrasicolus</i> has a low biomass level – <i>Sardina pilchardus</i>: fully exploited ▪ GSA 05 – <i>Aristeus antennatus</i> is overexploited – <i>Parapaneus longirostris</i> is overexploited – <i>Nephrops norvegicus</i> is overexploited – <i>Mullus surmuletus</i> is overexploited – <i>Mullus barbatus</i> is overexploited – <i>Merluccius</i> | <ul style="list-style-type: none"> ▪ The Spanish fisheries statistics and information system is based on the data from three different sources: sales notes, logbooks and landing declarations. ▪ 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. ▪ Data is stored and managed by the SIRENO database | <ul style="list-style-type: none"> ▪ IEO ensures the scientific monitoring of the fisheries of the main commercial species at the principal landing sites; ▪ Studies on growth and reproduction of demersal and small pelagic objective species are routinely carried out. ▪ In 2010 experimental fishing and underwater visual census surveys were conducted in the marine protected areas (MPA) of Columbretes, Llevant-Cala Ratjada and Cabrera to assess populations protected from fishing in these areas. ▪ The annual international bottom trawl survey | <ul style="list-style-type: none"> ▪ Data collection on employment and trends in domestic consumption. | <ul style="list-style-type: none"> ▪ Quarterly surveys monitoring oceanographic conditions off Málaga (GSA 1), Murcia (GSA 6) and Mallorca (GSA 5); ▪ Research activities are related to Marine Protected Areas. ▪ A new project (TROFOALBORAN) has initiated focusing on the pelagic ecosystem trophic web dynamics influencing the early life stages of sardine and anchovy. | <ul style="list-style-type: none"> ▪ The Spanish ministerial order APA/254/2008, of January 31st, that establishes an integral management plan for fisheries resource conservation in the Mediterranean is currently enforced. ▪ From 2010, the management plan is continued by Order ARM/143/2010, of January | <ul style="list-style-type: none"> ▪ More emphasis is encouraged on studies focusing on the impact of environmental changes (climatic variability, increase of gelatinous plankton, etc.) on the early life stages of exploited species to assess its consequence on recruitment variability, as well as studies on the influence of environmental factors |

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| | | <p><i>merluccius</i> is overexploited</p> <ul style="list-style-type: none"> ▪GSA 06 - <i>Parapenaeus longirostris</i> is overexploited - <i>Mullus barbatus</i> is overexploited - <i>Merluccius merluccius</i> is overexploited ▪GSA 01 - <i>Engraulis encrasicolus</i> is fully exploited - <i>Sardina pilchardus</i> is fully exploited | <p>developed by the IEO;</p> <ul style="list-style-type: none"> ▪Secretariat of Maritime Fisheries is developing a global tool to compile the different sources of information in a common database. | <p>MEDITS was carried out with the aim of estimating relative abundance index of the main demersal species.</p> <ul style="list-style-type: none"> ▪MEDIAS, the international acoustic survey in the Mediterranean, was carried out in summer 2010. ▪IEO Mediterranean tuna research program. ▪The National Research project on BFT biology and migration patterns initiated in 2007 (MIGRATUN), has been developed along 2009. ▪Research activities on Albacore (<i>Thunnus alalunga</i>, ALB) were developed on board recreational and long-line fishery vessels targeting ALB. ▪Small tuna species study on maturity and fecundity rates, age and growth. ▪Biological sampling and tagging of <i>Xiphas gladius</i>. | | <ul style="list-style-type: none"> ▪The project INDEMARES launched in 2009 aiming to promote research, conservation and assessment of the sea and its resources. | <p>25th, including artisanal gears within the management framework.</p> <ul style="list-style-type: none"> ▪The General Secretariat for the Sea keeps on managing the seven Spanish Mediterranean Marine Reserves. | <p>affecting catchability and fleet efficiency.</p> |
| Tunisia | <ul style="list-style-type: none"> ▪Fleet: about 11,298 vessels ▪Production (2009): about 100, | | <ul style="list-style-type: none"> ▪The national Data collection system is managed by the "Direction générale de la pêche et de | <ul style="list-style-type: none"> ▪Assessment of marine resources in Tunisian waters (1996-2002); ▪Research programmes ESREB, ESSATEL and ERACHID (2002- | <ul style="list-style-type: none"> ▪Socio-economic indicators of the fisheries of the Gulf of Gabès and of the north and east regions of the country; | <ul style="list-style-type: none"> ▪Monitoring of nesting sites of turtles. ▪Monitoring network for turtles and | <ul style="list-style-type: none"> ▪Trawling ban in GSA 14 between 1st July 2010 and 30th September 2010. | |

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| | 451 tonnes <ul style="list-style-type: none"> ▪ Fishing operations in GSAs 12, 13 and 14. | | l'aquaculture"; <ul style="list-style-type: none"> ▪ Improvements to the system developed in 1995 are foreseen in the coming years; ▪ Data collection is through logbooks and port inspections; ▪ Databases for biological and environmental data are in place. | 2006); <ul style="list-style-type: none"> ▪ BIHARE Project: Biology of pelagic and demersal exploited species (2007-2010); ▪ LAMPAROS Project: Eggs and larvae, abundance and migration of pelagic species (2007-2010); ▪ CHANCHOUL Project: Selective pelagic trawling (2007-2010) ▪ Joint assessment of <i>Parapenaeus longirostris</i> through MedSudMed framework in 2010. | <ul style="list-style-type: none"> ▪ Use of bio-economic models for the king prawn fishery in the Gulf of Gabes. ▪ Study on the profitability of vessels targeting small pelagic species. | <ul style="list-style-type: none"> ▪ cetaceans. ▪ Genetic studies on turtles. ▪ Age and growth studies of elasmobranches. ▪ Systematics of <i>Dasyatidae</i>. ▪ Interaction of cetaceans with entangling nets | | |
| Turkey | <ul style="list-style-type: none"> ▪ Fleet (2010): 17,440 units; ▪ Production: 425,275 tonnes in 2009. ▪ Fishing operations in GSAs 22, 24, 28, 29, | <ul style="list-style-type: none"> ▪ Scientific stock assessment studies are currently not in place in Turkey. ▪ According to landing figures of recent years it can be said that stocks level reached maximum harvestable level. | <ul style="list-style-type: none"> ▪ An integrated web-based Fisheries Information System (FIS) has been developed and is composed of modules interacting to introduce and extract data to/from a centralized database; ▪ MARA is planning to shift the paper-based logbook into the electronic one; ▪ AVMS has been started in 2008 with the vessels involved into | | <ul style="list-style-type: none"> ▪ Two studies on socio economical status of Aegean fishery and northern Mediterranean fishery were completed by fisheries faculties of Aegean University and Mersin University. ▪ A study on the socio economical analyses of Mediterranean fishermen has been completed by the Economical Research Institute of MARA. | <ul style="list-style-type: none"> ▪ On-going project (partly funded by GEF) entitled: <i>Strengthening Protected Area Network of Turkey</i>. | | |

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| | | | bluefin tuna fishing (about 200 vessels); ■ As from 2010, fishing vessels over 15 meters (about 1250 vessels) will be under an obligation to have Automated Identification System (AIS) installed. | | | | | |