

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



GENERAL FISHERIES FOR THE MEDITERRANEAN
Thirty-fourth Session
Athens, Greece, 14–17 April 2010
REPORT OF SCESS/SCSA/SCSI TRANSVERSAL WORKSHOP ON THE ASSESSMENT, MANAGEMENT AND MONITORING OF FISHING CAPACITY IN THE GFCM AREA*  Rome, Italy, 17-19 February 2010

<sup>\*</sup> Available only in English

#### Opening and arrangements for the workshop

- 1. The workshop was attended by fifteen experts from eight GFCM Members (Bulgaria, the European Union, France, Italy, Morocco, Spain, Tunisia and Turkey), along with experts from the FAO Fisheries and Aquaculture Department, FAO regional projects and the GFCM Secretariat. The list of participants is given in Appendix B
- 2. The Acting Executive Secretary of the General Fisheries Commission for the Mediterranean (GFCM), Mr Abdellah Srour, opened the meeting and welcomed the participants. He recalled the context and the objective of the Workshop, which is to provide scientific and practical guidelines to GFCM to appraise the impacts, requirements and effects of the different options in relation to possible freezing of fleet capacity (TOR in Appendix C). He underlined that a Draft Recommendation on the management on fishing capacity was proposed during the 33<sup>rd</sup> session of the GFCM (Tunisia, March 2009) and that the Commission decided to revisit it during its next session which will be held in Athens (April 2010).

#### **Designation of the Chairperson and Rapporteur**

- 3. Ms Rebecca Metzner from the FAO Fisheries and Aquaculture Department was appointed as Chairperson of the workshop.
- 4. Mr Federico De Rossi from the GFCM Secretariat was appointed as Rapporteur.

#### Adoption of the agenda

5. The Agenda was adopted with minor change. The agenda is given in Appendix A

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<sup>&</sup>lt;sup>1</sup> Appendix S of GFCM 33<sup>rd</sup> Session report

#### Overview of international instruments on the management of fishing capacity and global trends

- 6. Under this agenda item, the Chairperson Ms Rebecca Metzner, in her capacity as a specialist on the management of fishing capacity, delivered a presentation entitled "Managing Fishing Capacity Instruments, Global Trends, & Options".
- 7. In the introduction of her presentation Ms Metzner reviewed
  - o the generic description of overcapacity;
  - o the reasons why overcapacity develops; and
  - o the fiscal, biological, human, and social impacts of overcapacity.
- 8. The presentation covered the various instruments<sup>2</sup> that have been developed, the global trends in how fishing capacity is being managed and the increasing importance of tenure security for fishermen, the use of rights-based approaches, and the need to build on and enhance existing social structures. She noted that the available options and tools are either based on incentive blocking or incentive adjusting approaches and noted the respective implications of using these approaches (Annex D) for managing fishing capacity. Specifically, she highlighted that, under incentive blocking approaches, fishers work to maximize their current revenues via catch quantities at whatever cost it takes, that participants are not motivated to work to minimize their costs in order to maximize their profits, and that, as a result, the fishers have every reason to overcapitalize and over invest as the primary means for ensuring that they catch more fish and generate more revenues than their competitors. Hence, when such a strategy used in capture fisheries where the sustainable amount of fish can be caught is finite, it is a recipe for commercial waste, escalating management and enforcement costs, and resource collapse due to overfishing. In addition, it was noted that it is well recognized that controlling, incentive blocking approaches are only effective in the short run (FAO 2004).
- 9. The Chairperson went on to outline the need of a strong recognition among the countries about the economic and biological waste caused by over-fishing. It was emphasized how important it is to change how fisheries are managed and to then complement these new management systems with measures to address IUU fishing.
- 10. One expert from Tunisia highlighted the importance of a regional common and precise definition of fishing capacity. In relation to this matter, the Chairperson reminded the participants that several definitions of Fishing Capacity exist such as those available in the FAO Fisheries Glossary <sup>3</sup>.
- 11. The GFCM Secretariat also informed the participants that the finalisation of a glossary of scientific terms<sup>4</sup> is underway thanks to the work performed by a consultant with the financial support of the CopeMedII project. At GFCM-SAC level the definition of Fishing Capacity is based on the FAO glossary: "The ability of a stock of inputs (capital) to produce output (measured as either effort or catch). Can be measured by number of vessel, gross tonnage, hold capacity, horsepower, capital used for harvesting fish, etc. Reflects potential rather than nominal fishing effort."
- 12. The need of clearly defining the potential capacity, the actual capacity, the over capacity and fishing effort was raised by some experts. In this regard, the EU expert stressed on the importance of having understandable indicators, such as tonnage and engine power for the measurement of fishing capacity. She also referred to the relationship between fishing effort and fishing capacity and explained that the former is an expression of the measurement of fishing activities conducted by a given fleet or fishing capacity, and which is directly related to the measurement of fishing mortality.

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<sup>&</sup>lt;sup>2</sup> The Code of Conduct for Responsible Fisheries (CCRF), the International Plan of Action for the Management of Fishing (IPOA-Capacity) Capacity, the Regional Plan of Action for the Management of Fishing Capacity (RPOA-Capacity), National Plans of Action for the Management of Fishing Capacity (NPOA-Capacity), and the "no NPOA" countries.

<sup>&</sup>lt;sup>3</sup> FAO Fisheries Glossary (<a href="http://www.fao.org/fi/glossary/default.asp">http://www.fao.org/fi/glossary/default.asp</a>)

<sup>&</sup>lt;sup>4</sup> GFCM:SAC12/2010/Inf.16 > "Draft glossary of scientific terms of interest for the SAC" by Jordi Lleonart http://151.1.154.86/GfcmWebSite/SAC/12/GFCM\_SAC12\_2010.Inf.16.pdf

- 13. The participants concurred with the above views and agreed on the definition of fishing capacity as given in the current version of the SAC glossary.
- 14. Tunisian experts informed the participants about the fact that although a strong fishery law is present at their national level, several difficulties were encountered in the enforcement of the regulations. Referring to the fisheries law issue, the Chairperson stressed on the importance of involving the fishermen in the national decision process by showing them the practical benefits to their fishing activities of laws and regulations.

#### Development, current status and future trends of fishing capacity in the GFCM Area

- 15. Mr Matthew Camilleri, from the GFCM Secretariat, presented an overview of the information received through the questionnaire on fishing capacity, purposely designed for collating information on the subject to be used as a basis for discussions during the workshop. He informed the participants that fourteen<sup>5</sup> GFCM Members had submitted the completed questionnaire and that those received by 12<sup>th</sup> February 2010 (twelve questionnaires) were considered in the review undertaken by Mr Jean Jacques Maguire (GFCM Consultant). Mr Camilleri, also presented an outline of the Consultant's report <sup>6</sup> which listed the following conclusions:
  - Most countries seem to have the tools (laws and regulations) to manage capacity one way or the other.
  - All countries that replied have a fleet register and are able to monitor entry and exit in the fleet. Many update their register in real time based on several sources of information.
  - Capacity is most often defined as GT and kW, but other more general definitions can be found.
  - Licensing exists in most if not all countries schemes. They may apply to fishermen, to fishing vessels, to both, or to fishing vessel owners.
  - Consistent with the observation that the fleets are old, there are plans to modernise them in several countries.
  - The artisanal sector is very important in several countries.
  - It will be a challenge to modernise the fleets without substantially increasing their ability to kill fish, i.e. their fishing capacity.
  - Few countries have explicitly and formally evaluated if their fishing capacity was commensurate with the productive capacity of the fishery resources they have access to.
  - GFCM could be an appropriate forum to explicitly and formally evaluate if fishing capacity is commensurate with the productive capacity of available fishery resources.
  - The evaluation of fishing capacity versus the productive capacity of available resources should be made in the context of the modern concept of sustainability with the aim of

<sup>&</sup>lt;sup>5</sup> Albania, Algeria, Bulgaria, Croatia, Cyprus, European Union, France, Greece, Italy, Lebanon, Morocco, Spain, Tunisia, Turkey.

<sup>&</sup>lt;sup>6</sup> Background paper for the SCESS/SCSA/SCSI Transversal workshop on the assessment, management and monitoring of fishing capacity in the GFCM Area

improving conditions under the four components of sustainability (bio-ecological, social, economic, and institutional).

- 16. Ms Olga Armeni, from the European Union, delivered a presentation on the management of fishing capacity under the Common Fisheries Policy. She informed the participants that the Community Fleet Register (CFR) is updated on a regular basis with the aim of being reliable and consistent. EU Member States' quarterly transmissions are validated by a comprehensive validation system (front). All commercial fishing vessels are recorded in CFR.
- 17. Ms Armeni went on to explain that the fishing license, which contains the minimum requirements for each vessel, is a relevant fleet management tool, in particular concerning the capacity limitation for each Member State. In addition, it is a very important document for the control and inspection of fishing activities. She stressed the fact that the main objective of the EU's fishing capacity management is to achieve a sustainable balance between fishing capacity and fishing opportunities. The EU expert concluded her presentation by informing that capacity management is based on an entry-exit regime and capacity levels of Member States fleet cannot be exceeded.

# Appraisal of the strengths and weaknesses of the fishing fleets, the sustainability of fisheries resources and the current national mechanisms to control and manage fishing capacity.

- 18. On the basis of the information provided by Members' through their responses to the questionnaire on fishing capacity, together with additional information provided by the experts, the workshop appraised the strengths and weaknesses and current mechanisms to control and manage fishing capacity. Appendixes E, F, G, H contains summary tables of the information contained in the questionnaires including specific tables on strengths and weaknesses.
- 19. Some experts offered to provide additional information on their respective countries' situation as summarised below<sup>7</sup>:

#### Morocco

- 20. Le secteur des pêches occupe une place importante dans l'économie nationale et contribue de façon dynamique au développement du Maroc en termes de création d'emplois, de sécurité alimentaire et de génération de revenus. La richesse et la diversité des ressources halieutiques des côtes nationales, renforcées par l'expansion remarquable de la demande mondiale des produits de la mer et la stagnation de la production mondiale des captures, constituent de grandes opportunités pour le secteur des pêches et de l'aquaculture au Maroc. Cependant, le domaine fait face à de multiples contraintes qui persistent au niveau des différents maillons de la chaîne de valeur du secteur (difficultés dans la gestion des ressources halieutiques, appareil de production du domaine à moderniser...).
- 21. Eu égard à ces multiples enjeux et contraintes, les pouvoirs publics, ont apporté ces dernières années des changements structurels dans la gouvernance du secteur des pêches ayant pour objectifs la création des conditions d'un développement durable reposant particulièrement sur un cadre législatif et réglementaire adéquat, une gestion des ressources par des instruments économiques efficaces, une mise à niveau du domaine et une meilleure valorisation des captures. Un vaste chantier a été donc lancé pour la réforme du secteur de la pêche côtière et artisanale dans le cadre du programme 'Tbhar".
- 22. Les principaux objectifs assignés à ce programme consistent dans la mise à niveau et la modernisation de la flotte côtière et artisanale en vue d'améliorer et de conserver la qualité des captures ainsi que les conditions de vie, de travail et de sécurité des marins-pêcheurs. De fait, et pour faire face aux modifications qualitatives et quantitatives des ressources halieutiques et aux menaces d'épuisement des stocks de poisson, une attention particulière est accordée à la gestion rationnelle de ces ressources.

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<sup>&</sup>lt;sup>7</sup> This part contains original text as provided by the participants.

- 23. Par ailleurs, le programme 'Ibhar" qui s'inscrit dans le cadre de la nouvelle stratégie de pêche « Halieutis », ambitionne d'équiper près de 16.000 barques en installations de stockage et de conservation et l'équipement de 1.800 navires en matériels de préservation et de valorisation de la qualité des produits. Il prévoit également la modernisation de la flotte côtière à travers le remplacement de 800 navires par des unités de nouvelle génération sans augmenter la capacité de pêche. En terme de financement, ce programme bénéficie d'une enveloppe budgétaire de 5 MMDH répartis entre l'Etat pour 1 MMDH, les prêts bancaires pour 3 MMDH et l'autofinancement pour 1 MMDH. Dans ce cadre, un fonds de garantie a été mis en place.
- 24. La pêche des espèces de petits pélagiques, d'espèces démersales et de thonidés en Méditerranée marocaine a atteint une production de 42 615 tonnes au cours de l'année 2008. Cette production a été capturée par 165 senneurs, 247 palangriers, et 144 chalutiers, et 550 barques artisanales. Les principales espèces exploitées le long des côtes marocaines sont la sardine, le chinchard, le maquereau, l'anchois, l'espadon, les thonidés mineurs, le merlu, le pageot acarné, le pageot commun, la bogue, le poulpe, la sole, la crevette rose, et des espèces de squales.
- 25. La collecte de données statistiques de pêche et d'effort, se fait pratiquement d'une manière exhaustive, à travers les structures administratives des pêches (Département des Pêches et l'Office National des Pêches). Les ressources halieutiques peuplant la zone s'étendant entre Saidia et Tanger sont nombreuses et diverses. Ces ressources appartiennent à des espèces pélagiques et démersales. L'exploitation de ces ressources halieutiques se fait au moyen d'un ensemble d'engins de pêche en fonction des espèces cibles tels que la senne coulissante, le chalut de fond, les palangres de fond et de surface, les madragues....
- 26. Dans le cadre de la gestion de sa flottille, le Maroc a adopté un gel d'investissement en construction de nouvelles unités de pêche depuis 1992 en n'autorisant que les opérations de remplacement et de refonte, et de reconversion sans augmenter la capacité de pêche. D'autres mesures sont adoptées dans l'objectif de limiter et /ou réduire la capacité de pêche dans les eaux marocaines telles que : la fermeture des zones de pêche, le repos biologique de deux mois (octobre-novembre) pour l'espadon de la méditerranée, l'interdiction de la pêche des chalutiers au-delà de 3 milles marins des côtes...
- 27. Dans le cadre de la gestion durable des petits pélagiques en Méditerranée marocaine, le Département de la Pêche Maritime démarra à partir de 2010, la mise en place son plan d'aménagement de ces ressources en novembre 2008, fixant le conditions et les modalités de pêche des petits pélagiques dans cette zone. Ce plan concerne l'exploitation des espèces suivantes: la sardine, la sardinelle, le chinchard, l'anchois et le maquereau (TACs, zoning, nombre de navires autorisés, ...).
- 28. Par ailleurs, le Royaume du Maroc vient d'adopter sa nouvelle stratégie de développement (HALIEUTIS) en 2009 qui s'articule autour de 03 axes majeurs: à savoir l'exploitation durable des ressources halieutiques de côtes nationales, le développement d'une pêche performante et l'amélioration de la compétitivité afin de conquérir de nouvelles parts de marché.

#### Tunisia

- 29. La Tunisie a adopté une stratégie pour la conservation des ressources halieutiques et notamment les pêcheries benthiques s'articulant sur:
  - Une assise juridique qui ne cesse d'être actualisée stipulant notamment:
    - La répartition des eaux territoriales en 3 zones de pêche en vue de déterminer l'effort de pêche adéquat et éviter une surcapacité de pêche
    - L'organisation des campagnes de pêche pour les plus importantes espèces généralement à haute valeur commerciale
    - La soumission de la construction ou de l'importation de bateaux de pêche dépassant les 0.5 T de jauge brute à une autorisation préalable de l'administration

- L'instauration, à partir de 2009, d'un système de repos biologique pour mieux conserver les zones et les ressources menacées
- Instauration, depuis les années 1990, d'un comité tripartite regroupant l'administration, la recherche et la profession, dont le rôle fondamental est de mieux gérer les campagnes de pêche et le suivi des activités de pêche.
- Geler les nouvelles constructions d'unités de pêche pour l'exploitation des ressources démersales le long des cotes Est et Sud du pays (particulièrement pour les chalutiers benthiques)
- 30. Cependant, pour encore mieux gérer la capacité de pêche en Tunisie, certaines difficultés méritent d'être résolues en vue de:
  - Renforcer les moyens humains et matériels au niveau des services centraux et régionaux pour un meilleur suivi des activités du secteur de la pêche et encadrement de la profession
  - Améliorer le système statistique des pêches et généraliser son informatisation
  - Moderniser la flottille de pêche assez vétuste (90% des unités ont plus de 10 ans dont environ la moitie sont déjà âgées de plus de 20 ans).

#### Turkey

31. No any plan/scheme is not in place regarding regulation of fishing capacity in Turkey. Updated fleet registry and restriction on global number of national fleet are the primary management instructions implemented in the regulation of fishing capacity. The fishing capacity has been freeze since 2002. A total of 10 percent decrease has been recorded in the number of national fleet since then. License granted to a given vessel is withdrawn in the cases where the vessel is not extended its license within 3 years following date of license expiry.

#### France

32. La gestion des activités et de la capacité de pêche relève de deux ministères : le ministère de l'alimentation, de l'agriculture et de la pêche (direction des pêches maritimes et de l'aquaculture, 3 pl. de Fontenoy, 75007 Paris) chargé de l'octroi des droits à produire et le ministère de l'écologie, de l'énergie, du développement durable et de la mer (direction des affaires maritimes, Grande Arche, Paroi Sud, 92055 La Défense) chargé de la délivrance et du contrôle des titres de navigation et de sécurité.

#### Un cadre réglementaire communautaire complété par une réglementation locale

- 33. Le cadre global de la gestion et du contrôle des activités et de la capacité de pêche est fourni par la législation communautaire (politique commune des pêches, plafond national de capacité exprimé en jauge et puissance, interdiction d'augmentation de la capacité de pêche, absence d'aides communautaires ou nationales pour la construction de navires...).
- 34. En complément de ce cadre communautaire, il existe une réglementation locale propre à la Méditerranée qui vise à réguler les activités de pêche en agissant sur la puissance des navires (limitation de la puissance des chalutiers à 316 kW et inspection du respect de cette limitation), ainsi que sur les caractéristiques techniques des engins (longueurs des filets, hauteur des nappes), les périodes d'activité et les zones d'activité.

#### Une gouvernance en partie locale

35. La réglementation communautaire en matière d'autorisations de pêche peut être complétée par une réglementation locale. Cette réglementation locale est élaborée en concertation avec les organisations professionnelles de pêcheurs et validée par les autorités publiques après vérification de sa conformité avec la réglementation nationale et communautaire et, dans la plupart des cas, après une étude scientifique d'impact.

- 36. En matière de gestion de la capacité de pêche, les autorisations de construction, de renouvellement et de travaux pour les navires de moins de 24 mètres sont discutées au niveau local entre l'administration, les représentants de la profession et les organisations de producteurs. Pour les navires de plus de 24 mètres, les décisions relatives à ces domaines sont prises au niveau central, soit le ministère de l'alimentation, de l'agriculture et de la pêche.
- 37. Les questions de jauge et de puissance relèvent également du ministère de l'écologie, de l'énergie, du développement durable et de la mer car elles constituent des enjeux importants en termes de sécurité de la navigation, de sécurité, d'hygiène et de confort à bord.

#### L'objectif de développement durable

38. L'objectif de la politique de pêche de la France est d'atteindre un développement durable, c'està-dire d'ajuster la capacité de pêche à la ressource tout en préservant les équilibres socio-économiques. Dans cette perspective, la France a mené depuis 2000 plusieurs plans de sortie de flotte ciblés sur la flotte méditerranéenne. La France a choisi comme objectif cible sur le moyen et long termes le rendement maximal durable (RMD). L'atteinte de cet objectif doit se faire néanmoins dans le respect des équilibres socio-économiques. La France est donc très attentive aux mesures d'accompagnement économiques à destination des professionnels.

#### Spain

- 39. In 1974 Spain began a policy of stabilization of the fleet, in order to prepare its future accession to the EEC, consisting basically on the provision of vessels removals for the construction of new vessels. Since its accesion to the EEC in 1986, renewal and modernization criteria, as well as global capacity management measures have been strictly applied, which has allowed reaching the targets fixed by the European Commission. At a first stage, through the multi-annual Operational Programmes, and then by keeping below the entry-exit reference levels established by Commission Regulation (EC) 1438/2003.
- 40. This evolution of the Spanish fleet shows an overall reduction in terms of power and tonnage, which implies a reduction of the fishing fleet capacity and therefore in the overall fishing effort, as a result of policies of provision of vessels removals, for the construction of new vessels and vessel modernization works, as well as by financial aids for definitive cessation of fishing activities.
- 41. This ongoing process has come out in an important reduction in the number of ships of the Spanish fishing fleet during the last 11 years: 6.402 ships, representing 37 % of the fleet, so from 17.518 vessels in 1998 to actually 11.116 ships (31 December 2009). In terms of tonnage and power, this represents a reduction in tonnage of 115.215 GT and 427.375 kW in power.
- 42. As for the Mediterranean Spanish fleet, it represents the 16% of the total, and the same reduction criteria have been applied, so there has been an important decrease in the number of vessels as in the rest of the Spanish fleet as above mentioned: it has passed from 4.307 vessels in 2002 to 3.260 in 2009, that represents a reduction in tonnage of 12.914 GT (from 82.060 in 2002 to 69.146 in 2009) and 73.626 Kw (from 350.530 in 2002 to 276.904 in 2009).
- 43. The Spanish fishing register was implemented in 1989 according to EEC rules, and the actual one corresponds to the Community Fishing Fleet Register, established by Regulation (EC) 26/2004. It applies to all fishing vessels. Capacity is established by the vessel's tonnage in GT and its power in KW. Fishing capacity is managed with the aim of decreasing fishing capacity to reach sustainable fisheries. At EU level, fisheries management measures within the Mediterranean are laid down by Council Regulation (EC) 1967/2006, concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea. At national level, there is a management plan for the Mediterranean in force since 2006. In 2008 it established the aim of a 10% reduction of fishing effort for trawl and purse seine vessels in 2 years. The current one, in force since 1 February 2010, establishes as well the aim of a 10% reduction of fishing effort for the whole Spanish fleet in the Mediterranean within the next 3 years. Within the frame of the European Fisheries Fund, measures are

implemented through the national Operational Programme 2007-2013, under Council Regulation (EC) 1198/2006.

#### The GFCM regional fleet register as a tool to monitor fishing capacity in the Region

- 44. Mr Matthew Camilleri referred the participants to the various GFCM data and information reporting requirements as specified by a number of GFCM binding decisions. He underlined, in particular, the relevance of the GFCM Regional Fleet Register (RFR), the Authorised List of Vessels (AVL), as well as the GFCM Task 1 database, to the measurement and monitoring of fishing capacity.
- 45. He recalled that data submissions to the RFR are expected to start in 2011, in line with Recommendation GFCM 33/2009/5, and that article 6 of this Recommendation specifies that the RFR information system shall include relevant fleet capacity monitoring tools, such as dynamic charts on fleet capacity in terms of tonnage (GT) and power (kW), and other data browsing facilities.
- 46. Mr Camilleri added that the measurement of fishing capacity, in terms of tonnage, of authorised vessels over 15 m in length was currently available through the AVL database, albeit with some gaps in data and a combination of GRT and GT measurements. He also reminded the participants that the Task 1.1 component provided capacity data, namely tonnage (GT) and power (KW), by GFCM fleet segment.
- 47. The participants agreed that the successful implementation of the Regional Fleet Register is fundamental in developing a fishing capacity monitoring and management scheme within the GFCM Area.

# Conclusions and formulation of a draft plan for the management and monitoring of fishing capacity in the GFCM Area

48. In the light of the information reviewed by the workshop and on the basis of the discussions held, the participants drew up a set of conclusions and proposed options, for consideration by the Commission, on the management and monitoring of fishing capacity in the Region. The experts agreed to present the outputs and proposals of the workshop in three sections - Main considerations; Specific areas for action; Possible options for the way forward - as reported below:

#### A) Main considerations

- 49. The following is a list of pertinent elements to be taken into consideration in developing fishing capacity monitoring and management schemes.
- As the long term aim is to reach sustainability,
  - there is an ongoing need for complete information regarding the status of fish stocks throughout the entire GFCM area, and
  - There is a need for complete information regarding fishing capacity throughout the entire GFCM area, and especially the spatial distribution of this capacity by groups of species and geographical sub-areas.
- According to scientists, it is obvious that more than 30% of stocks in EU waters, where data exist, are fished outside biological limits and 80% are fished at levels above MSY.
- ➤ There are commitments of Johannesburg, the International Plan of Action for the Management of Fishing Capacity (IPOA-Capacity), and the actions and obligations already adopted by the GFCM.
- The fishing capacity of the fleet will vary according to the resources being targeted.
- > There is a clear link between resources and fleet segments.
- ➤ There are many examples clearly indicating successes in the regulation and reduction of fishing capacity within GFCM area. Based on the best practices and lessons learned a region-based strategy can be formulated for GFCM area.
- > There is the issue of the efficiency of fishing gear and electronic equipment such as used for detecting fish.
- There is a necessity to harmonize fisheries regulations, particularly for shared stocks.
- Many boats in the fleets are old and that there are plans to modernize them in several countries and that it will be a challenge to modernise the fleets without substantially increasing their ability to kill fish, i.e. their fishing capacity.
- Modernization is important and there are existing programmes for modernization, so it is critical to specify the purpose and objectives of such programs and, in particular, their potential contribution or ability to increase capacity.
- > There is a link between fleet capacity and sustainable stocks that therefore there is a need to find the optimal capacity in each fishery which reflects the balance between highest and sustainable exploitation.
- > There are potential negative impacts of shifting or displacing fishing capacity.

- There is a need to recognizing the importance of taking into account the specifics of sub-zones such as the Black Sea.
- Action must be accompanied with clear timeframes for achieving results which recognize the different financial, administrative, legislative and reporting changes that may be needed to do this.
- ➤ It is important to take into account the socio-economic balance when introducing measures to stop fishing activity.
- There is a need to take into account issues of safety whilst considering issues of vessel design, size and ability to catch fish.

#### B) Specific Areas for Action

50. On the basis of the above considerations, the Workshop Participants identified the following options of opportunities and specific actions.

#### > Management Actions

- Freeze fishing capacity within the soonest possible period based on scientific evidence, best practices and lessons learned.
- A part of such scientific advice will include analyses in order to reveal the existence of overcapacity per fishing area/sub-region, fleet segmentation, fishing type, species and fishing gears.
- Implementation of precautionary approach to fisheries is of importance for sustainable exploitation of fisheries in GFCM area. This approach needs to be followed strictly by the GFCM Members.
- Formulate and implement a Regional Action Plan.
- Further work by GFCM Members to ensure the successful and complete implementation of the regional fleet register.
- Use an agreed regional fishing capacity measure unit as established in the GFCM Recommendation GFCM 33/2009/5

#### > Monitoring of fishing capacity of fleets operating in the GFCM Convention area

Create an entry / exit system that will provide the basis for the management of fishing capacity.

#### Regulation of new constructions and imports of vessels

- In exceptional cases where scientific evidence shows that there, are sustainable new fishing opportunities, keeping in mind best practices and lessons learned, new constructions and/or imports of vessels may be allowed.
- In situations where there may not be new fishing opportunities but there is a desire for new constructions or import of vessels, then there should be a system of control as follows:
  - All new constructions should have official authorization.
  - To authorize a new construction or import, it should be necessary the destruction or exit from the register of at least the same tonnage and power that the one pretended to build. It could be studied that they were of a same gear as well.
  - To compensate the tonnage and power of the new vessel it should be necessary to exit from the register active vessels, i.e. registered and currently fishing vessels.
- Fishing Licenses of withdrawn vessels would be transferred to the new vessel, taking into account that the indivisible "vessel unit" to transfer is composed by tonnage + power+ fishing license.

#### Regulation of the modernisation of the fishing fleet

• No works shall be taken for the renewal of the vessels with the exception for the purpose of safety, monitoring control and surveillance (MCS) and improving hygienic conditions.

#### **➤** Monitoring of fishing activity

• As part of monitoring fishing activity there should be a logbook system and catch documentation systems where appropriate.

#### > Other issues to take into account in order to manage fishing capacity

- Management plans, either regional or local.
- Possible specific plans for restructuring or modernisation of some fleets.
- Collect data regarding the status of various stocks and the ecosystem
   – and particularly for shared stocks at the national level in a manner that is consistent and harmonized with other countries.
- Use of one or more indicators of fishing capacity to reflect the balance between sustainable exploitation of a fishery and the resources both qualitatively and quantitatively as described in the FAO Technical Guidelines for Responsible Fisheries 4 Supplement 3. Managing fishing capacity.
- Consider the use of some limitations or other mechanisms in order to prevent negative impacts
  of the transfer of fishing capacity from one operational unit to another and thereby endanger
  the stability of biodiversity.
- Collect data about national technical measures (length of net, period of fishing, restricted areas, forbidden gears, etc.).

#### C) Possible options for the way forward

- 51. On the basis of the actions and considerations described above, the General Fisheries Commission for the Mediterranean may wish to consider the following options, either individually or in combination, for the way forward.
  - take no action i.e. maintain the *status quo*;
  - develop a Regional Plan of Action for the Management of Fishing Capacity for the GFCM (RPOA-Capacity GFCM) which includes specific actions, activities, and timeframes including those mentioned above which are further developed through sub regional workshops to be held over the coming 12 to 15 months (2010 2011).
  - freeze fishing capacity throughout the GFCM area no later than the full implementation of the fleet register.

#### Adoption of the report

52. The conclusions and draft plan for the management and monitoring of fishing capacity in the GFCM Area (paragraphs 48-51) were adopted by the participants at the end of the meeting.

Appendix A

#### Agenda

Opening and arrangements for the workshop

Designation of Chairperson and Rapporteur

Adoption of the agenda

Overview of international instruments on the management of fishing capacity and global trends

Development, current status and future trends of fishing capacity in the GFCM Area

Discussion and appraisal of the strengths and weaknesses of the fishing fleets of GFCM Members and the sustainability of fisheries resources they exploit, on the basis of information presented under item 5.

Discussion and appraisal of the current national mechanisms to control and manage fishing capacity, on the basis of information presented under item 5.

The GFCM regional fleet register as a tool to monitor fishing capacity in the Region (by GFCM Secretariat)

Conclusions and formulation of a draft plan for the management and monitoring of fishing capacity in the GFCM Area.

Adoption of the report

#### Appendix B

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Appendix C

#### **Terms of Reference**

# SCESS/SCSA/SCSI transversal Workshop on the Assessment, Management and Monitoring of Fleet Capacity

The Workshop should review the existing knowledge, the conceptual definitions, the state of the art from different experiences on the assessment, monitoring and management of fishing capacity. The final objective is to provide scientific and practical guidelines to GFCM to appraise the impacts, requirements and effects of the different options in relation to possible freezing of fleet capacity.

The Workshop should address in particular the following items:

#### 1. Objectives of fishing capacity management

Clarify the objectives of managing fleet capacity in order to define the methods, instruments and measures that assure the sustainability of the fishing activities.

#### 2. Methods and definitions

Review the scientific information and the existing knowledge available (e.g. FAO; International Plan of Action; National Plan of Action; Regional Plan of Action; Scientific, Technical and Economic Committee for Fisheries; national regulations; case studies) to define proper mechanisms of management of fishing capacity in the Mediterranean context, including the measurement of capacity. Analyze the appropriateness of transferability mechanisms (between the gears and areas to assess capacity transfer and allow the adaptability of the fishing capacity) and census definition.

#### 3. Identification of data needs

Evaluate if the data available through GFCM TASK 1, GFCM Fishing Fleet Register and other means, are suitable for the assessment of fishing capacity (biological data on fish stocks, economic data by fleet segment, investments, GT, employment, data on production such as quantity and prices on landing per species, costs and effort), investment and fleet restructuring plans.

#### 4. Monitoring

Review the policy framework and regulations on fishing capacity in force at Mediterranean level in order to provide advice on methods of control (costs, effectiveness, etc.). Identify potential systems for fishing capacity control in the GFCM (registers, bluebox, satellite, market) that assure the transparency of agreements on fishing capacity.

The preparation of the Workshop will take at least three months, and may need support from a specialized consultant and or FAO/FIEP It is suggested that the first semester of 2009 is the most appropriate time for the Workshop so as to ensure the timely preparation of the guidelines prior to the Thirty-fourth GFCM session.

# Appendix D

# Fisheries Management Tools: Duration and Effect(s) on Overcapacity

Management Approach	Management Tool	Duration		Effects
			Direct Effect(s)	Longer-Term Effect(s)
	Limited-entry programmes	Temporary	Limits participation	<ul> <li>Capital-stuffing—where a vessel's horsepower, length, breadth and tonnage are increased—typically occurs</li> <li>Drives changes (technological innovations) in gear, in fishing periods or areas</li> <li>Creates motives for IUU fishing</li> <li>Capacity will increase</li> </ul>
	Buy-back programmes	Temporary	<ul> <li>Purchase of vessel(s), licence(s) and/or gear(s)</li> <li>Capacity may be temporarily reduced in the fishery</li> </ul>	<ul> <li>Any improvements in stock abundance will attract additional capacity</li> <li>Creates motives for IUU fishing</li> <li>Capacity will increase</li> </ul>
Incentive Blocking	Gear restrictions, vessel restrictions	Temporary	Initial reduction in harvests	<ul> <li>Substitution of unregulated inputs or new gear types to replace restricted inputs</li> <li>Regulations lose effectiveness and additional regulations required</li> <li>Creates motives for IUU fishing</li> <li>Capacity will increase</li> </ul>
Approaches	Aggregate quotas, total allowable catches (TACs)	Temporary	Likely to accelerate the growth of fishing capacity rather than reduce it	<ul> <li>Capacity and effort increase if effort and entry unrestricted</li> <li>Race for fish ("fishing derby") develops</li> <li>Creates motives for IUU fishing: additional regulations required, particularly to limit discarding and false reporting, ensure traceability and to control transhipment</li> <li>Potential for frequent overruns of the TAC resulting in over-exploitation</li> <li>Frequently results in excess processing capacity and processing plant downtime during closed season(s)</li> <li>Capacity will increase</li> </ul>
	Non-transferable vessel catch limits (individual quotas/IQs)	Temporary	Overcapacity not addressed     May limit additional growth of capacity	<ul> <li>Requires regulations to ensure traceability and to control transhipment</li> <li>Additional regulations required</li> <li>Creates motives for IUU fishing</li> <li>Capacity will increase</li> </ul>

Management Approach	Management Tool	Duration		Effects
			Direct Effect(s)	Longer-Term Effect(s)
	Group fishing rights: community development quotas (CDQs), community-based management systems collaborative- or cooperative-based systems	Potentially enduring	Reallocation of the fishery to the recipient community	Requires group understanding of asset value of user rights, capability to manage     Reduction of overcapacity or capacity containment depends on subsequent management
	Designated / Limited Access Privilege Programs (DAPPs, LAPPs) Catch Share Programs	Potentially enduring	Reallocation of the fishery to the recipient community	<ul> <li>Requires group understanding of asset value of user rights, capability to manage</li> <li>Capacity managed automatically, overcapacity does not occur/recur</li> <li>Compliance concerns internalised by fishers to protect asset (rally against IUU fishing)</li> <li>Supplementary regulations helpful to reinforce conservation</li> </ul>
Incentive Adjusting Approaches	Territorial use rights (TURFs)	Potentially enduring	Reallocation of the fishery to the recipient community	<ul> <li>Requires group understanding of asset value of user rights, capability to manage</li> <li>Reduction of overcapacity or containment of capacity linked to subsequent management</li> </ul>
	Individual effort quotas (IEQs) denominated in trawl time, gear use, time away from port, fishing days, etc.	Mid-term	Enforcement difficult     Additional regulations     required to control input     substitution	<ul> <li>Capital-stuffing—where a vessel's horsepower, length, breadth and tonnage are increased—frequently occurs</li> <li>Requires regulations to ensure traceability and to control transhipment</li> <li>Creates motives for IUU fishing</li> <li>Capacity will increase</li> </ul>
	Individual transferable quotas (ITQs), individual fishing rights (IFQs)	Enduring	Market forces drive out overcapacity     Consolidation occurs if overcapitalised	<ul> <li>Capacity managed automatically, overcapacity does not occur/recur</li> <li>Compliance concerns internalised by fishers to protect asset (rally against IUU fishing)</li> <li>Supplementary regulations helpful to reinforce conservation</li> </ul>
	Taxes and royalties	Indefinite duration	<ul><li>Market forces drive out overcapacity</li><li>Consolidation if overcapitalised</li></ul>	<ul> <li>Administratively intensive: requires constant adjustment of tax levels to maintain capacity at desired level</li> <li>Politically difficult to impose, easier to rescind</li> </ul>

# Appendix E

# **Questionnaire Responses - General Table**

	Algeria	Bulgaria	Croatia	Cyprus	Greece	Italy	Lebanon	Morocco	Spain	Tunisia	Turkey
Year for fleet		2009	2005 to 2009	2008		2009		2009	2009		
Year for fisheries data Year for fishermen			2005 to 2009	2008					2008		
data			2005 to 2009	2008					2007		
Is there a fishing vessel register in your country?	Y	Y	Υ	Y	Y	Y	Y	Y	Y	Y	Y
If there is a fishing vessel register in your country, when was it implemented?	1962	2007	2001	2004	1991	1989	2004	1919	2000	1962	1971
If there is a fishing vessel register in your country, at what frequency is it updated (every month, every year, every 2, 3, 4 or 5 years?)	3 Months	Daily	Instantly	3 months	Real time	Daily from harbour master	N/A	Regularly, weekly, real time	Daily	5Y	Instantly
If there is a fishing vessel register in your country, how is it updated (by field survey, through the issuing of annual or less frequent fishing licenses, other?)	Field surveys, licenses, yearly field visits	Annual fishing licenses, changes in ownership, changes to the vessel or its gear	Field surveys, license registration and surveys linked with other databases	Following administrativ e decision (e.g. approved request)	Real time	Daily from harbour master	N/A	Licenses, changes to vessels, change of ownership, refitting, replacement	Various	Regional questionnair es	Electronicall y
If there is a fishing vessel register in your country, to what types/sizes of vessels does it apply?	All fishing vessels	All	All	Inshore / offshore from 4 to 40m	All professional vessel	All professional vessels	All	All vessels linked to fishing, including recreational, etc.	All	All	All commercial vessels

	Algeria	Bulgaria	Croatia	Cyprus	Greece	Italy	Lebanon	Morocco	Spain	Tunisia	Turkey
If there is a fishing vessel register in your country, what types/sizes of vessels are excluded?	None	Aquaculture vessels	None	According to (EC) Regulation 26/2004	None		None	None	None	None	
How do you define capacity in your country?	Fleet that can exploit the resource without overexploiting	GT + kW	In GT and kW	According to EU regulation	GT + KW	GT + kW	N/A	Number of vessels, gear type, kW, LOA, GT	GT and KW	Number of vessels	Number of vessels
Is fishing capacity managed in your country?	No, but there is a program for new vessels	Υ	Y	Υ	Y		N/A	Y	Y	Υ	Y Freeze on fishing licenses
If fishing capacity is managed in your country, when was capacity management implemented?		2007	Capacity management for trawl fishery in internal waters was implemented in 2005 by limiting the engine power, and further by withdrawal of capacity. Capacity management for BFT vessels is currently being implemented.	01/01/2010	1991		N/A	Freeze on new investment (1992), rules for vessel replacement (1999)	1986	1962	2000
If fishing capacity is managed in your country, what is its main objective (increase / decrease fishing capacity to better correspond with fishing opportunities)		Decrease in line with EU legislation	The main objective is to secure the sustainability of resources as well as the maintenance of the activity. In BFT fishery the capacity was frozen in 2008 (in terms of kW and GT), and is planned to be decreased using the methodology adopted by relevant RFMOs. Decrease in other fisheries is the predominant trend in capacity management.	Decrease fishing capacity and fishing effort	Adjust to fishing possibilities		N/A	Rational exploitation, sustainable managemen t, managemen t of fisheries, matching capacity to resources	Decrease	Match capacity to available resources as defined by science	Match capacity to available resources
Are there any specific projects to manage fishing capacity in your country?	A management plan is in prep	No	The most recent capacity management plan was adopted for the adjustment of the fleet capacity for BFT. This plan was adopted within the framework of a RFMO	Managemen t plan to be submitted	Y		N/A	Yes	EC and National	Research on stock abundance, VMS, Zoning, fishing licenses	N

	Algeria	Bulgaria	Croatia	Cyprus	Greece	Italy	Lebanon	Morocco	Spain	Tunisia	Turkey
			and involves withdrawal from the fleet of excess capacity for BFT fisheries. Croatia has also introduced a withdrawal scheme for bottom trawl fisheries in internal waters. This scheme has been in operation for several years and the aim was to reduce fishing capacity exercising the effort in internal waters (within the baselines).								
If fishing capacity is managed in your country, how is it managed?		Monitoring reference level and applying Entry/Exit regime	For certain elements of the fleet, entry/exit scheme has been set up. Other fleet segments are covered by withdrawal scheme, where the aim is to permanently reduce the number of certain gears in certain areas. Croatia also operates extensive spatial/temporal closures schemes for effort management, as majority of the fleet operates within the baselines exclusively.	Based on the managemen t plan			N/A	According to legislation	Operational program		Limits on the number of vessels, fishing period, fishing area, fishing gear etc.
If fishing capacity is managed in your country, what resources (human and financial) are invested in the program?		3 state employees	1.2 million euros in 2008 and 2009, 5 people	Human and financial			N/A				

	Algeria	Bulgaria	Croatia	Cyprus	Greece	ltaly	Lebanon	Morocco	Spain	Tunisia	Turkey
Is it necessary for fishermen and / or fishing vessel owners to obtain a license in order to be able to fish (licensing scheme)?	Y	Y	Υ	Annual licenses for fishermen and / or vessels	Y	Y for professional fishing	Y	Yes, also for fishing without vessels (pêche à pied) and recreational fishing	Vessels	Y	Y
If there is a licensing scheme in your country, is it necessary to obtain a license for the fisherman, the fishing vessel, or both?	Boat owner for one or more vessels	Both	Both	Specific fishing licenses issued only to owners of licensed fishing vessels	Both	Vessel	Vessel	Vessels, except for "pêche à pied" to the fisherman	Vessels	Vessel and fisherman for fishing on foot	Vessels (for 2 yrs) and fishermen (for 5 yrs)
Please describe the characteristics of the licensing scheme, to what types of fishing activities it applies, and to what types / sizes vessels it applies?	All fishing activities, commercial, recreational, scientific	see quest	see quest	see questionnair e			Licenses for Coastal fishing (< 6nm) to artisanal vessels		All except aquaculture and auxiliary		
What vessels types /sizes or what types of fishing activities are excluded from the licensing scheme?	None	None		All vessels are required to have a license	None		Vessels that the Ministry of Public Works & transport decides that they cannot fish in Lebanese territorial waters e.g. trawlers.		All except aquaculture and auxiliary	None	None
Has there been a plan, is there a plan, or is it anticipated that there will be a plan to modernise the fishing sector?	Il y a eu le Programme National du Développement de la Pêche et de L'aquaculture, et le Plan de Soutien à la	Fishing sector can apply to the European Fisheries Fund	A plan is being prepared	Modernise the fishing sector through the European Fisheries Fund	Yes		Yes	Υ	Reduce to adjust to available resources	In prep	No plan

	Algeria	Bulgaria	Croatia	Cyprus	Greece	Italy	Lebanon	Morocco	Spain	Tunisia	Turkey
	Relance Économique; II y a actuellement le Schéma Directeur de Développement des Activités de la Pêche et de L'aquaculture.										
What would the modernisation imply, replacing the fleet or investing refitting existing vessels?			The modernisation of the sector would imply primarily the creation of coastal infrastructure of common interest, aiming at securing higher level of organization in the sector, higher level of food quality and safety and thus higher level of end prices for the producers. The plan also entails modernization of vessels in terms of food safety and hygiene, primarily through modernization of holding and freezing capacities and handling equipment. Other measures directed towards fleet are also envisaged.	Refitting existing vessels	Le plan de modernisati on vise des investissem ents à bord des navires de pêche pour la rénovation de la flotte, avec la contribution du Fonds européen pour la pêche conforméme nt aux dispositions de l'Art. 25 du Règlement (EC)1198/20 06 du Conseil.		Both	Upgrading, replacing, improving working conditions and safety	Refit existing vessels	11th five year plan foresees a reduction of the demersal fleet and a modernisati on	Once a lifetime permission to increase vessel size by 20%
How do individuals in your country become fishermen (by apprenticeship on fishing vessels, by formal training in fisheries schools, other)?	In fisheries schools	Formal training in fisheries school	Need to pass a technical exam	Apprentices hip for artisanal fishery, no requirement s for other fishing segments	Apprentices hip and workshops	Apprentices hip	Apprentice	On the job training and specific training in maritime centers	Formal training in schools	On the job training	On the job training

# Appendix F

# **Questionnaire Responses - Strengths**

Algeria	Bulgaria	Croatia	Cyprus	Greece	Italy	Lebanon	Spain	Tunisia	Turkey
Underexploitation of the stocks, especially small pelagics	Catches less than marginal allowable catches	The main strength is the diversity of economically important species of marine organisms. This provides the possibility for development of different market niches and hence stronger possibilities of usage of different elements of fishery.	Management measures employed (restriction of number of licenses for each fleet category, closed seasons, restrictions on the use of fishing gears, improvement of gear selectivity, plan for further reduction of licenses), aiming to achieve a balance between fishing effort and availability of fishery resources.	None	I punti di forza e di debolezza allo stesso tempo consistono nel fatto che la Pesca italiana ha carattere prevalentemente artigianale, con tutte le relative conseguenze sia positive che negative. Quanto alle seguenti risposte , dati come le catture o eventuali piani sono in fase di realizzazione .	Only coastal (<6nm) resources have been overexploited; while deeper sea resources are still practically intact.	In general, there is a big tradition both in fishing and in fish products consumption by population, with a high professional specialization.	La loi régissant l'exercice de la pêche et ses textes d'application qui tient compte des résultats de la recherche scientifique en la matière;	Private sector acceptance of the need to manage the sector.
	Low cost of labour	Another strength is the availability of fishing grounds and relatively high level of protection of nursery and spawning areas. There are continuous monitoring of resources in place, as well as elaborative MCS measures.	Implementation of adequate measures for monitoring fishing activities and enforcing regulations		The strengths and weaknesses are both linked to mainly artisanal nature of the lian fishery with all the related consequences.	EEZ not yet defined, but when defined, it is expected to open new frontiers.		Création d'une commission consultative (composée par l'administration, la recherche et la profession) pour l'organisation de l'exercice de la pêche;	Lack of information on state of the commercial fish stocks

Algeria	Bulgaria	Croatia	Cyprus	Greece	Italy	Lebanon	Spain	Tunisia	Turkey
		Another important element is the vicinity of the largest markets in the world (Italy, Spain), where fresh product may be sold soon after the catch				Efficient cooperatives and syndicates (membership did not exceed 40% of fishermen)		Instauration d'un système de repos biologique.	
						Organized fish sales sector			

# Appendix G

# **Questionnaire Responses - Weaknesses**

Algeria	Bulgaria	Croatia	Cyprus	Greece	Lebanon	Spain	Tunisia
The collection of information on the fisheries	Old fishing fleet	The main weakness is relatively low level of development of coastal infrastructure and the lack of ports, landing places and fish markets.	Intensive exploitation of demersal resources in the coastal zone.	Small vessels	Large number of Artisanal predominantly old wooden and poorly equipped fishing vessels.	The high costs of fuel is making the subsistence for the fisheries sector more difficult	Manque de ressources humaines au niveau des services centraux et régionaux pour un meilleur suivi des activités du secteur de la pêche et encadrement de la profession;
	Lack of fish auctions or markets where fishermen can obtain better prices	The fleet is relatively old and consists of majority of small units. This may present both the strength and the weakness, since the old age and artisanal structure of the fleet prevents the fishermen from having the possibility of offering large quantities to the market, but at the same time allow for the possibility of supply of local markets with high quality fish.	Decrease of fishery production.	Large number of vessels older than 20 years old	Lack of institutional credit	It is necessary to continue the adaptation of the fleet towards a more sustainable activity, according to the criteria of the EU PPC, based on the best scientific fishing sector advice available, as well as the experience of the fishing sector.	Informatisation non généralisé du système statistique des pêches;
	Not enough funds for effective control of illegal fishing	Most of the fleet is not equipped for fishing outside the territorial waters.	A large number of fishing vessels in the Cyprus fishing fleet is of old age, with a need for modernisation.	Coastal multispecies fisheries	Lack of official social and medical coverage		Irrégularité des débarquements et inadéquation des circuits de distribution du poisson bleu.
		The sector is not well organized, which further hampers efforts in introduction of management and marketing measures. The result of this situation is high level of dispersion of units, thus rising the MCS costs (speed boats, coverage of islands, numerous spot landings which need to be covered by control plans, VMS etc) and lowering the end-benefit of the fishermen as well (inability to offer larger quantities, lack of organized structure within the sector, dependence on large marketing chains or middlemen in sales).	Fishermen are mainly of old age.		Poorly equipped ports		
			At present lack of adequate space for mooring all fishing vessels.		Outdated fisheries regulations		

Algeria	Bulgaria	Croatia	Cyprus	Greece	Lebanon	Spain	Tunisia
			At present lack of an auction market, with implications on the quality and preservation of landed fish.		Lack of control measures		
					Pollution		
					Use of illegal fishing		
					gear.		

# Appendix H

# **Questionnaire Responses - Sources of information**

	Algeria	Bulgaria	Croatia	Cyprus	Greece	Italy	Lebanon	Могоссо	Spain	Tunisia	Turkey
Sources for the fishing fleet:	Service National des Gardes de Côtes (Ministère de la Défense). Ministère de la Pêche et des Ressources Halieutiques (Directions des Pêches et des Ressources Halieutiques des Wilayas)	National agency for fisheries and aquaculture and Executive agency "Maritime administration"	Croatian Fleet Register	DEPARTMEN T OF FISHERIES AND MARINE RESEARCH	Registre national des bateaux de pêche	Direzione Generale della Pesca.	Majdalani, S. 2005. Census of Lebanese Fishing Vessels and Fishing Facilities. Lebanese Ministry of Agriculture Document. 144pp.?	Registre central de la flotte de pêche/ services du département de la pêche maritime, Rabat-Maroc	Operational Fishing Fleet Register, managed by General Secretariat for the Sea.	Statistiques des pêches du Ministère de l'Agriculture, des Ressources Hydrauliques et de la pêche (Direction Générale de la Pêche et de l'Aquaculture)	Ministry of Agriculture (MARA), Turkish Statistical Institute (TUIK), Undersecretari at for Maritime Affairs
Sources for the fishing activity:	Directions des Pêches et des Ressources Halieutiques des Wilayas (Ministère de la Pêche et des Ressources Halieutiques)	Fishing logbooks	Logbook entries and VMS data	DEPARTMEN T OF FISHERIES AND MARINE RESEARCH http://www.mo a.gov.cy/moa/ dfmr/dfmr.nsf/ DMLindex_en/ DMLindex_en DMLindex_en openDocume nt	VMS et Journal de pêche (Rég. Du Conseil 2847/1993), Service National pour les Statistiques		Majdalani, S. 2005. Census of Lebanese Fishing Vessels and Fishing Facilities. Lebanese Ministry of Agriculture Document. 144pp.	Registre central de la flotte de pêche/ services du département de la pêche maritime, Rabat-Maroc	sales notes, landing declarations and VMS	Statistiques des pêches du Ministère de l'Agriculture, des Ressources Hydrauliques et de la pêche (Direction Générale de la Pêche et de l'Aquaculture)	Ministry of Agriculture (MARA), Turkish Statistical Institute (TUIK), Undersecretari at for Maritime Affairs

	Algeria	Bulgaria	Croatia	Cyprus	Greece	Italy	Lebanon	Morocco	Spain	Tunisia	Turkey
Sources for the fishermen:	Service National des Gardes de Côtes (Ministère de la Défense). Ministère de la Pêche et des Ressources Halieutiques (Directions des Pêches et des Ressources Halieutiques des Wilayas)	Completed applications for licensing	Only rough statistical data are available	DEPARTMEN T OF FISHERIES AND MARINE RESEARCH	Registre national des bateaux de pêche		Majdalani, S. 2005. Census of Lebanese Fishing Vessels and Fishing Facilities. Lebanese Ministry of Agriculture Document. 144pp.	Registre central de la flotte de pêche/ services du département de la pêche maritime, Rabat-Maroc	SG for Statistics of the Ministry for the Environment and Rural and Marine Affairs. Data come from different sources as the Department for Work, the National Statistical Plan or surveys	Statistiques des pêches du Ministère de l'Agriculture, des Ressources Hydrauliques et de la pêche (Direction Générale de la Pêche et de l'Aquaculture)	Ministry of Agriculture (MARA), Turkish Statistical Institute (TUIK), Undersecretari at for Maritime Affairs
Sources for the fishery sector:	de la Pêche et des Ressources Halieutiques.	Questionnaire s filled out my fishermen	Statistical data from publications and data from available data sources in DoF	DEPARTMEN T OF FISHERIES AND MARINE RESEARCH	Registre national des bateaux de pêche et Journal de pêche		Majdalani, S. 2005. Census of Lebanese Fishing Vessels and Fishing Facilities. Lebanese Ministry of Agriculture Document. 144pp.	Registre central de la flotte de pêche/ services du département de la pêche maritime, Rabat-Maroc	all the abovemention ed	Statistiques des pêches du Ministère de l'Agriculture, des Ressources Hydrauliques et de la pêche (Direction Générale de la Pêche et de l'Aquaculture)	Ministry of Agriculture (MARA), Turkish Statistical Institute (TUIK), Undersecretari at for Maritime Affairs