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RECREATIONAL FISHERIES IN THE
MEDITERRANEAN COUNTRIES: A REVIEW
OF EXISTING LEGAL FRAMEWORKS



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GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN

**RECREATIONAL FISHERIES IN THE MEDITERRANEAN COUNTRIES: A REVIEW
OF EXISTING LEGAL FRAMEWORKS**

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PREPARATION OF THIS DOCUMENT

The importance of recreational fisheries in the Mediterranean has been emphasized by the General Fisheries Commission for the Mediterranean (GFCM) during its thirtieth Session (2006). The Commission mandated its Scientific Advisory Committee (SAC) through the Sub-Committee on Economic and Social Sciences (SCESS) to undertake a series of studies on the legislative and socio-economic aspects of recreational fisheries in the Mediterranean.

The purpose of this study is to provide a snapshot of recreational fisheries legal frameworks within the Mediterranean with a view to initiating discussion and experience sharing throughout the basin with the longer term intent to promote homogenous and comprehensive recreational fisheries management in the Mediterranean. To be of use over time, this preliminary document would need to be updated regularly with information provided to the GFCM Secretariat, especially on the enactment of any new law or regulation, or amendments of texts in force, in order to facilitate this process.

The document was prepared by Charline Gaudin (Legal Assistant) and Cassandra De Young (Fishery Planning Analyst), Development and Planning Service, FAO Fisheries and Aquaculture Department.

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ABSTRACT

The purpose of this study is to provide a snapshot of recreational fisheries legal frameworks within the Mediterranean with a view to promoting homogenous and comprehensive recreational fisheries management in the Mediterranean. The study reviews the existing laws and regulations concerning recreational fisheries adopted by Mediterranean countries. It provides first an overview of relevant international initiatives regarding the management of recreational fisheries and a summary of marine recreational fisheries within the Mediterranean basin. The core of the study focuses on a comparative analysis of the main management measures adopted by States, including: (i) access regimes to fisheries resources; (ii) conservation measures; (iii) special recreational fisheries regulations; and (iv) monitoring, control and surveillance of recreational fisheries.

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Abbreviations and acronyms

BFT	Bluefin tuna
CCRF	Code of Conduct for Responsible Fisheries
CF	commercial fishing
EEZ	exclusive economic zone
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GFCM	General Fisheries Commission for the Mediterranean
ICCAT	International Commission for the Conservation of Atlantic Tunas
UNCLOS	United Nations Law of the Sea Convention
MCS	monitoring, control and surveillance
RF	recreational fisheries
RFMOs	regional fisheries management organizations
TAC	total allowable catch
UN	United Nations

1. INTRODUCTION

Recreational fishing has been documented as one of the most popular activities along the coasts of numerous countries around the world, such as Canada, Italy, Spain, and the United States of America (Sutinen and Johnston, 2003). In other countries, recreational fisheries (RF) played an important social and economic role, even if not formally assessed through the use of surveys and other quantification techniques. For example in Egypt, recreational fishing was a traditional pastime, particularly in the coastal large cities of Alexandria, Damietta, Port Said and Al Areah.

Moreover, it has been conceded that recreational fishing was, at the time of this report, a growing activity in the Mediterranean area.¹ The development of tourism in various regions and the enhancement of charter fishing tours have contributed to the extension of recreational fishing to almost all Mediterranean countries. This phenomenon has not come without raising concerns on the potential effects of such activities on fish stocks as well as interactions with commercial fishing activities. According to Sutinen and Johnston (2003), for example, the dramatic rise in the United States marine recreational fishing activity has exacerbated conflicts with commercial fishers and depletion of fish stocks. This remark does not hold for all species in all regions where the two sub-sectors co-exist but is more likely than not for some species, such as the highly migratory species (e.g. bluefin tuna) threatened by overexploitation and greatly prized by recreational and commercial fisheries alike. However, without a proper analysis, it is not possible to identify the potential conflicts between recreational and commercial fisheries in the Mediterranean Sea.

The increasing significance of RF in Mediterranean waters in general and particularly in some areas, such as the Adriatic Sea, will require that countries (at the national, subregional, and basin-wide levels) define sustainable policies and adopt adequate management measures, on the one hand, to guarantee the benefits (e.g. economic, cultural, and social) generated by recreational fisheries and, on the other hand, to protect the marine resources from overfishing and other negative impacts of fishing. However, the importance of RF in the Mediterranean has been largely underappreciated, whether it be from the point of view of its impacts on marine resources or of its socio-economic potential. This under-evaluation may stem, in part, from a lack of investigations into the values and impacts of RF.

As a result, at the time of this study, there was no concerted action for the sustainable development of RF at the Mediterranean Sea-level; neither were there clearly defined national recreational fisheries policies within the Mediterranean countries. However, Spain (both at state and autonomous regions levels) and several other Mediterranean countries had adopted comprehensive, or at least detailed, recreational fisheries regulatory systems. Nine countries (Albania, Croatia, France, Greece, Italy, Serbia-Montenegro, Slovenia, Spain and Turkey) had detailed RF regulations; Lebanon had sparse regulations on RF (i.e. various provisions found in different decrees); while Algeria, Morocco and Tunisia regulated mainly underwater recreational fishing. Unfortunately, little or no RF information was readily available for Israel and Libyan Arab Jamahiriya; therefore, the status of RF in these countries has been largely omitted from this report.

Although necessary, the simple existence of a legal framework is not sufficient for promoting sustainable development of RF, particularly if the regulations are obsolete or irrelevant and enforcement is non-existent or inefficient. Indeed, Mediterranean countries demonstrated a tendency to neglect the management of RF and particularly its monitoring and control for management purposes.

The purpose of this study is to provide a snapshot of RF legal frameworks within the Mediterranean with a view to promoting discussion and experience sharing throughout the basin. Information for 17 Mediterranean countries (including the European Community) was collected and presented as homogeneously as possible to enable cross-country comparisons. The purpose of the report is not to recommend a one-size-fits-all legal framework for the basin but to assist in moving towards

¹ See, for example, Cacaud (2005).

sustainable development of RF through positive examples and by suggesting areas where homogenization of rules and regulations could assist in obtaining these goals. In the absence of country visits, the information within the report came from published and grey literature, internet sites, and personal communications with relevant individuals.

The study is organized into two main parts: 1) a background section presenting international RF initiatives guiding RF management in the Mediterranean and a brief overview of the fisheries themselves (i.e. targeted species, socio-economic impacts, stakeholders, existing policies, and legal frameworks), and 2) a more detailed description of the management measures proscribed for in the legal texts. In addition, detailed tables of RF management measures by country are provided in the Appendixes to this report.

2. BACKGROUND

This chapter provides the context for recreational fisheries (RF) management in the Mediterranean, including international conventions and policy lines guiding RF, recommendations of the relevant regional fishery bodies (RFB), as well as regulations stemming from the European Commission, mandatory to a subset of the basin's countries. The second section of this chapter presents an overview of the RF in the Mediterranean covering the following questions: what types of RF were practiced in the Mediterranean, which were the main RF-targeted species, what was known about the socio-economic impacts of RF in the region, who were the primary stakeholders in RF management, what were the existing national policies guiding RF management, and what RF legal frameworks were in place in the Mediterranean countries.

2.1 International initiatives guiding recreational fisheries management in the Mediterranean

Adopted on 10 December 1982 and entered in force on 16 November 1994, the United Nations Convention on the Law of the Sea (UNCLOS) provided a new framework for management of marine resources; creating new rights and responsibilities for the coastal states. More specifically, Article 61 on exclusive economic zones (EEZ) stated that a coastal state may take the appropriate measures of conservation and management in order to avoid overexploitation of marine living resources. Furthermore, the coastal states, as well as the relevant international organizations (e.g. regional, international), may cooperate to that purpose. Given the extractive nature of RF, States should include RF in their attempts to conserve and sustainably manage their marine resources.

In March 1991, during its nineteenth session, the FAO Committee on Fisheries (COFI) called for the development of new concepts which would lead to responsible and sustainable fisheries. Based on the request formulated by the International Conference on Responsible Fishing held in Cancun (Mexico) in 1992, FAO prepared an international Code of Conduct for Responsible Fishing (FAO, 1995), which was unanimously adopted on 31 October 1995 by the FAO Conference and which provided general principles and international standards of behaviour ensuring sustainable exploitation of marine living resources. The Code has as its main objective to “establish principles and criteria for the elaboration and implementation of national policies for responsible conservation of fisheries resources and fisheries management and development” [CoC Article 2b)]. The Code is voluntary and not legally binding, except regarding the articles based on relevant rules of international law, including those reflected in UNCLOS. The Code intends to provide a framework for national and international efforts to ensure sustainable exploitation of marine living resources, including not only targeted species but also the ecosystems on which they depend.

Although RF were not explicitly mentioned in the Code, the principles and standards of the Code are equally applicable to the conservation, management and development of all RF as with any other extractive fishing activities. As is provided in the Code, “States and all those engaged in fisheries management should, through an appropriate policy, legal and institutional framework adopt measures for the long-term conservation and sustainable use of fisheries resources” (CoC Article 7.1.1). Therefore, according to the Code, States should adopt RF regulations/measures preventing or eliminating excess RF fishing capacity as well as establish effective mechanisms for fisheries monitoring, control and enforcement to ensure compliance with their conservation and management measures.

The Resolution 4/95 adopting the Code requested FAO, *inter alia*, to elaborate as appropriate technical guidelines in support of the implementation of the Code in collaboration with members and interested relevant organizations. Three of the technical guidelines for responsible fisheries address RF explicitly: No. 4 on fisheries management (FAO, 1997a), No. 4 Supplement 2 on the ecosystem approach to fisheries (EAF) (FAO, 2002) and No. 2 on the precautionary approach (FAO, 1997b).

For example, the technical guidelines on the precautionary principle state that the following precautionary steps can also be applied to some recreational fisheries:

- a. “keep some areas closed to fishing in order to obtain the benefits noted above as item (d) under “New or developing fisheries”. Also ensure that excessive fishing effort does not develop in the open areas;
- b. delegate some of the decision-making, especially area closures and entry limitations, to local communities or cooperatives;
- c. ensure that fishing pressure from other (e.g. industrial) segments of the fishery does not deplete the resources to the point where severe corrective action is needed; and
- d. investigate the factors that influence the behaviour of harvesters to develop approaches that can control fishing intensity. For example, improving incomes of individual harvesters may reduce pressure on resources”.

Regarding data requirements and their use in the formulation of fisheries policy, the technical guidelines on fisheries management states that “at the level of policy-making, information on the potential magnitude, possibly measured in terms of potential catch, economic value and employment opportunities for each fishery or each stock should be provided”. The guidelines continue by affirming that “failure to do this could result in policies which lead to unrealistic social or economic expectations and hence encourage overexploitation”. The need for such information in RF is especially important in those RF that overlap with other fisheries sub-sectors.

According to the guidelines on EAF, limiting and adopting appropriate systems of access rights are necessary to responsible fisheries. The guidelines state that “management for a multitude of users-multiples fisheries, tourism, conservation, recreational fisheries and so on- will require appropriate allocation of resources and access to all the different user groups”. Examples of such concepts could include the division of the total allowable catch (TAC), when used, between commercial and recreational fisheries as well as the adopting of a compulsory system of recreational fishing licensing to regulate access to the resources.

In addition, the UN Fish Stocks Agreement (UNFSA) was adopted on 5 August 1995 for the implementation of the provisions of UNCLOS and entered in force on 11 December 2001. The UNFSA aims to ensure the long-term conservation and sustainable use of straddling and highly migratory fish stocks by requiring coastal states and states fishing on the high seas to cooperate for these purposes either directly or through appropriate subregional or Regional Fishery Bodies (RFBs) or arrangements. The obligations include the introduction of a system of obligatory licences, the exercising effective control and the reporting of catches and landings.

One example of such cooperation is seen through the International Commission for the Conservation of Atlantic Tunas (ICCAT)^{2,3} Recommendation 04-12 (2004) to regulate recreational fishing activities to ensure that these activities do not undermine sustainable exploitation of the stocks, notably the bluefin tuna stock, in the Mediterranean Sea. In consequence, ICCAT recommended the adoption of measures concerning recreational fishing activities in the Mediterranean Sea, including gear restrictions, prohibition of sales and catch declaration reports; valid for both sport and amateur fishing activities.⁴ Furthermore, ICCAT adopted its Recommendation 06-05 BFT (2006), including several provisions on prohibition of sales, catch data declarations, catch limits and catch and release fishing.

Likewise, for the first time, in 2006 ICCAT adopted its Resolution TOR 06-17 establishing a Working Group on amateur and sport fisheries,⁵ which would meet in late 2007 or early 2008. According to the Resolution, the Working Group would have to:

² ICCAT has been responsible since 1969 for the conservation of tunas and tuna-like species in the Atlantic Ocean and adjacent seas, such as the Mediterranean Sea. All ICCAT recommendations may be found at <http://www.iccat.es/>.

³ Among Mediterranean countries, the following States and Entities were members of ICCAT (last update 5/12/2006): Algeria, Croatia, European Community, France, Libyan Arab Jamahiriya, Morocco, Syria, Tunisia and Turkey.

⁴ For definitions of the various RF, see Section 2.2.1 of this report.

⁵ Title as adopted: Resolution by ICCAT to establish a working group on sport and recreational fisheries.

1. examine the biological and economic impact of amateur [recreational] and sport fishing activities on ICCAT-managed stocks and notably assess the level of harvest;
2. based on available information, identify approaches for managing the amateur [recreational] and sport fishing activities in ICCAT fisheries; and
3. report the results of deliberations to the Commission at its Meeting and, as appropriate, propose recommendations for next steps to manage the recreational and sport fishing activities in the Convention area. CPCs (Contracting Parties, Cooperating non-Contracting Parties, Entities or Fishing Entities) shall report prior to the Working Group meeting the techniques used to manage their sport and recreational fisheries and methods used to collect such data.

In addition, the Scientific Committee on Research and Statistics (SCRS) “should provide the Working Group with relevant information notably concerning the harvest levels in the recreational [amateur] and sport fisheries for most recent year(s) available in advance of the Working Group to assist deliberations”. The outcomes of the working group were not available when this report was developed.

A second RFB in the region, the European Inland Fishery Advisory Commission (EIFAC), had earlier formally recognized the importance of recreational fishing during its May, 1994 Consultation.⁶ During the 1994 Consultation, some key issues were identified, such as the lack of social and economic data on RF fisheries impeding an evaluation of the importance of RF in the region. Another observation included that existing legislation does not always favour sustainable use of resources. These discussions lead to a 1996 symposium on the social, economic, and management aspects of [freshwater] recreational fisheries which was convened in conjunction with the nineteenth session of EIFAC, held in Dublin from 11 to 14 June 1996. The symposium had as a charge to meet various objectives such as developing strategic guidelines for the effective management of recreational fisheries. The symposium consisted of a number of consecutive sessions, including one on the socio-economic and legal aspects of recreational fisheries and another on the criteria for management of recreational fisheries. Moreover, in preparation of the symposium, the EIFAC workshop on recreational fisheries planning and management strategies in Central and Eastern Europe was held in Slovakia, from 22 to 25 August 1995.

The symposium communicated the following recommendations, which were adopted by the nineteenth session of EIFAC:

- improved data collection systems should be established and implemented with pre-defined criteria to provide comparable basic data;
- methods should be developed for the application of socio-economic value estimates;
- EIFAC working party on communication and education should be established to facilitate improved understanding and communication between all the players (e.g. managers, scientists, recreational anglers); and
- EIFAC working party on recreational fisheries should progress the production of a code of Good Practice for Recreational Fishing (Recommendation Rome, 1994).

Additionally, the symposium made the following recommendations to its national agencies:

- responsible bodies in the Members Countries⁷ of EIFAC should adopt integrated, sustainable, long-term approach to aquatic resource management;
- the authorities responsible for the control of recreational fisheries should ensure that true economic and social value of these fisheries is included in decision-making processes; and
- the relevant administrative authorities should monitor, evaluate and adjust management strategies.

In the Mediterranean, the importance of recreational fisheries has been recognized at the institutional level by the General Fisheries Commission for the Mediterranean (GFCM) during its twenty-ninth

⁶ The EIFAC consultation on management strategies for European Inland fisheries and aquaculture for the twenty-first century, held in Rome, in May 1994, during the eighteenth session of EIFAC.

⁷ The Mediterranean countries that were members of EIFAC include Albania, Croatia, Cyprus, European Community, France, Greece, Israel, Italy, Spain and Turkey.

session in 2005 where it adopted the ICCAT Recommendation 04-12 regarding management measures concerning recreational fishing activities in the Mediterranean Sea (GFCM, 2005). Moreover, in 2006 the Confédération internationale de pêche sportive (CIPS) had joined the GFCM under an observer status. Finally, during its thirtieth session (2006), the GFCM recognized recreational fisheries as a new priority area of study and charged the Sub-Committee on Economic and Social Sciences (SCESS) to undertake a series of studies on the legislative and socio-economic aspects of RF in the Mediterranean; according to which this study has been compiled.

At the European level, the European Community (EC) had also recently demonstrated an increased interest in recreational fisheries. For example, the EC had adopted a regulation on management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea [(EC) No. 1967/2006 of 21 December 2006], which included a definition of recreational fisheries (i.e. leisure fisheries) and various provisions on that theme.⁸ The EC Council had adopted gear restrictions as well as prohibition of sales except under particular circumstances. As this regulation is directly applicable within the EC Member States, concerned administrations, including the relevant Mediterranean countries, will need to ensure that these provisions regarding RF are respected by anglers.

As another sign of growing interest in RF management in the Mediterranean, the first Mediterranean Congress of Salt Water Recreational Angling took place in Palma de Mallorca from 20 to 23 September 2006.⁹ The goal of the conference was to analyse the state of RF and its management in the Mediterranean as well as to share experiences from other countries; covering various themes, such as socio-economic impacts, legal frameworks, conservation and education opportunities, and charter fishing development. The Congress concluded that there was currently no common regulatory framework for the conservation and management of RF resources within Mediterranean waters and that there was a lack of information on the volumes of catch as well as on the importance of the fishing RF effort. The Congress claimed evidence that the economic and social importance of marine recreational fisheries was high, albeit not always well documented. The Congress recommended that common and/or consistent regulations should be established for the EC Member States as well as at the Mediterranean basin-level through the GFCM. Regarding technical conservation measures, the Congress also agreed to propose the adoption of different initiatives to the various national authorities, such as promoting catch and release fishing or establishing catch limits and moratorium areas and times for recreational fishing based on scientific criteria and prior stakeholder consultation. The Congress also proposed to lead various evaluations, such as assessments of the capacity (e.g. by number of boats) and of the extent of fishing (e.g. by fishing hours), as well as evaluations of the volume of catches (by species and live weight) by recreational craft. The Congress also highlighted the lack of participation from the recreational sector in fishing fora and decision making processes. Therefore, the Congress proposed to promote the presence of recreational fishing federations in the national and international forums responsible for the management of fishing resources. Finally, the Congress underlined the necessity to improve management controls in RF, “especially prohibiting the sale of catches and establishing minimum sizes”.

2.2 Recreational fisheries in the Mediterranean context

2.2.1 Definitions of recreational fisheries

In general, RF can be defined as a non-commercial (i.e. not for sale, barter, or trade) subset of capture/harvest fisheries; motivated by catching fish for fun, pleasure, or sport.¹⁰ More formally, Cacaud (2005) defined RF as “all types of fishing activities including sport fishing activities undertaken by any individual, with or without a boat, for leisure purposes, and does not involve the selling of fish or other aquatic organisms”. This definition further assumes that RF activities are not motivated by a dependence on fish for food. Within this broad definition, one may further categorize

⁸ See, particularly, Article 17.

⁹ For conference information, presentations, and conclusions, see <http://www.mediterranea-congres.org>

¹⁰ See, for example, Pitcher & Hollingworth (2002).

RF into amateur, tourism, and sport/competition recreational fishing; each having their own associated goals and defined as follows:

Amateur fishing,¹¹ for the purposes of this review, is defined as unorganized hobby fishing. Unorganized in the sense that it is not associated with specific events or competitions. Catches from amateur fishing are either released (catch & release) or are retained for private consumption.

Sport fishing¹² is described as “an organised activity involving free competition between fishermen to catch the largest fish of certain species, the largest number of specimens or the largest total weight depending on the rules of each particular competition” (SFITUM, 2004).

Tourism fishing can be understood as a fishing activity carried out by a third party who organizes a fishing expedition for tourists. Tourism fishing can be conducted by commercial fishermen (*pescaturismo*) or by recreational fishing professionals (“charter”); one main difference being the type of the boat used (commercial fishing boat vs. leisure boat). The aim of charter fishing is mainly to fish; whereas, with the concept of *pescaturismo*, the purpose is not only fishing but also to practice snorkelling, to eat on board fish cooked in a traditional way and just enjoy a day on a boat in middle of the sea. Legislation will differ for each segment of tourism fishing.

There is a tendency to use indifferently or loosely the terms sport fishing and recreational fisheries in the literature as well as in legislation. For example, the Article 19 of the Croatian Law on Marine Fishery of 2003 provide that “Sport-recreational fishing is catching fish and other marine organisms for the purpose of sport and recreation”, which also included free diving. Italy used the term sport fisheries but appears to regulate both amateur and sport fisheries. As target species, methods, as well as fisher demographics vary across the three RF sub-categories, it is necessary that legislations clearly define the terminology as well as the rules and procedures to be followed for each category.

In addition to the goal-based classification of RF provided above, RF may also be categorized by the location and tools used in the activity. In marine RF, one observes four basic groupings: *pêche à pied*,¹³ shore-based, boat-based and underwater fishing;¹⁴ with multiple further sub-divisions (as presented in Figure 1).

Recreational fishing from boats can also be further specified according to the modalities of fishing used under three sub-categories: stationary fishing¹⁵ (anchored or drifting), passive or harvest fishing¹⁶ and active fishing.¹⁷ The third category of which uses the propulsion of the motor to assist in the fishing activity; while the first two categories do not use motor propulsion.

One should note that these goal-based and modality-based categories will overlap; for example, underwater and boat fishing can be practised for sport, amateur or tourism purposes; further complicating their management.

¹¹ Amateur fishing is sometimes referred as recreational fisheries. For the purpose of this study we will understand as recreational fisheries, amateur fisheries, sport fisheries and tourism fisheries.

¹² Sport fishing is also referred to as tournament, competition and contest, and big-game fishing.

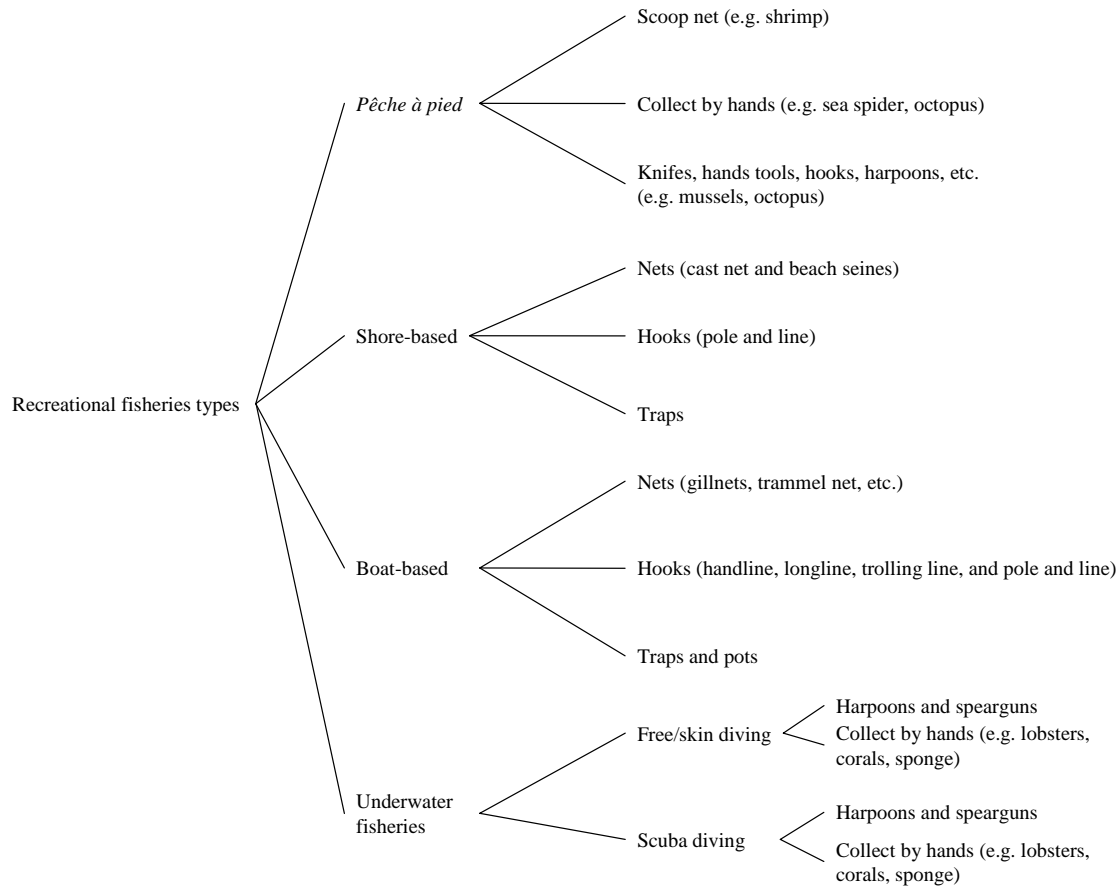
¹³ *Pêche à pied* can be defined as the fishing extractive activity consisting in collecting crustaceans and molluscs in the rocks but also on the beaches.

¹⁴ Underwater fishing can also be referred as spearfishing, skin-diving, harpoons fishing, scuba diving....

¹⁵ Includes: 1) Line fishing with rod (onshore or offshore): bottom line fishing, spinning, shumming, jigging; and 2) Rodless line fishing (onshore or offshore): handline fishing, jigging.

¹⁶ Includes: Longline, potting and nets.

¹⁷ Includes: Trolling (bait and line) from a moving boat (inshore or offshore).

Figure 1. Example of recreational fisheries stratification

2.2.2 Targeted species in Mediterranean recreational fisheries

Recreational fisheries (RF) targeted species varied from one region to another throughout the Mediterranean. In general, anglers on recreational vessels caught common pelagic, mid-water and demersal species. However, there were some species groups of common interest throughout the basin; most notably the “big game” species (e.g. blue shark, tunas [bluefin, skipjack, bonito, little tunny and albacore], amberjacks, dorados, dolphin fish, marlin and swordfish). Other wide-spread targeted species included mackerel, seabass and seabream species, dentex, bogue, European conger and mullet. Such commonality among species (and often the fishing methods used to catch them) could lend itself to the development of coherent and homogenized legal and management frameworks across the basin for these species. This is especially the case as such species are often targeted by the commercial fisheries as well; hence, are the possible subjects of conflicts between the two fisheries sub-sectors.

In the Adriatic Sea, the species fished differed from one coast to other, in part based on soil composition along the various coastlines. For example, in the Italian Adriatic through the gulf of Trieste, shored-based RF targeted mainly sand steenbras and, less commonly, seabream. Italian Adriatic boat-based RF Recreational fisheries primarily targeted fish from the mackerel family and horse mackerel. It is interesting to note that the species targeted by the RF fisheries did not overlap with those species targeted by the commercial fisheries in the area (i.e. sardines, anchovies, benthic species such as common sole, and shellfish) and, therefore, little conflict between the sub-sectors was recorded.¹⁸

The Slovenian and Croatian Adriatic shore-based RF mainly targeted white bream and seabream species. Boat-based RF principally targeted pandoras, picarels and the fish from the Sparidae family,

¹⁸ Personal communication with Marcel Ordan, President of CIPS

such as white seabream and annular seabream, as well as boat-based trolling for European seabass, dentex and fish from *seriola* family. RF fishing for squid was often performed by trolling with artificial lures or by drift boat with artificial lures or fresh sardines. As was the case in the western Adriatic, commercial fishermen principally fished for sardines, anchovy, mackerels, mullets and flattened fish. This fact and due to the large number of little islands in the region, there was limited conflict recorded between the commercial and recreational fishermen in this part of the Adriatic¹⁹.

Underwater fishing is the most selective activities among the different kinds of RF (Soliva, 2006). In addition, underwater fishing target species have a high gastronomic value. In Catalonia, Spain, the main target species are the white seabream, gilthead seabream, European seabass, conger eel, grouper, mullet, octopus, red scorpionfish, striped mullet, forkbeards, brown meagre, common dentex, combers and greater amberjack. Regarding underwater fishing in Morocco, the main species caught are octopus, groupers and bass.²⁰

Table 1 presents a partial listing of commonly targeted RF species for Egypt, France, Malta, Spain, and Turkey. A complete analysis of target species by country was not the scope of this report; however such a study should be considered a high priority for assisting in developing coherent basin-wide management strategies. A more in-depth review of the main target species caught by RF throughout the basin would assist in broadening our understanding of RF in general and of the possible areas of conflicts between RF and commercial fisheries in the Mediterranean.

¹⁹ Ibid.

²⁰ Personal communication with Malouli Idrissi, INRH Centre Régional Tanger, Morocco

Table 1. Common recreational fisheries-targeted species in Egypt, France, Malta, Spain and Turkey

Countries	Boat-based	Shore-based
Egypt	Groupers, kawakawa, chub mackerel, king fish, blue fish, comber, gurnard, lizard fish, bream, pandora, seabass, gilthead seabream, marble spinfoot.	
France	Offshore boat-based: bluefin tuna, swordfish and dolphinfish. Inshore boat-based: bogue, dentex, mullet, European conger and fish from the seabass family, the seabream family, ²¹ the mackerel family. Less commonly: veever, spotted dogfish, squawfish, gurnard, salema, wreckfish, rays, common sole.	Blenny, ballan wrasse, black scorpion fish, red mullet, wreckfish, common pandora, Spanish bream and wrasse.
Malta	Main species for competition: Albacore, Atlantic bonito, Atlantic little tuna, bluefin tuna and spear fish. Other common species landed: dolphinfish, combers, weevers, stone bass. Other species included: common squid, bogue fish, common seabream, Atlantic horse mackerel, chub mackerel and dentex. Others species caught by amateur fishermen: common pandora, painted comber, white bream, amberjack, saddled bream, rainbow wrass, Mediterranean morey, annular seabream, black and red scorpionfish and Common octopus.	n.a.
Spain	Main species for competition: bluefin tuna, the Atlantic little tuna, the Atlantic bonito and skipjack. Less common: frigate tuna and Albacore tuna. Other main species: gilthead seabream, European seabass, squid, common dolphinfish, bluefish, sand steenbras, greater weever, king fish, pompano, blackspout seabream and bullet tuna.	Gilthead seabream, white seabream, european seabass, sand steenbras, pompano, striped mullet, conger eel, greater weever, grey mullet, octopus, Spanish bream and salema.
Turkey	Bluefin tuna, albacore tuna, dentex, Atlantic bonito, Atlantic mackerel, chub mackerel, little tunny, pandora, fish from the seabream family, seabass and swordfish.	

Notes: n.a. = not available; the occurrence of bluefin tuna over 100 kg fished by French recreational fishermen in the Mediterranean reportedly declined to three in 2005.²²

Sources: Information provided by Ahmed Salem for the General Authority for Fishing Resources Development of Egypt; Marcel Ordan president of Confédération Internationale de la Pêche Sportive (CIPS); Malta (2005); the Federacion Española de Pesca y Casting, Soliva (2006); and Ünal (2006).

Non-targeted species

Bycatch or non-targeted species, terms often associated with commercial fisheries, also occur in RF. Non-targeted species in the Mediterranean comprised species such as sharks and rays, but also species resembling target species, such as Spanish bream and sharpnout seabream, living in the same grounds as pandora and white seabream.²³ Potentially under-reported and discarded, non-target species may constitute unnecessary ecological impacts that should be avoided and monitored within any RF management regime.

²¹ Common seabream, two-banded seabream, white seabream, etc.

²² Personal communication with Marcel Ordan, President of CIPS.

²³ Personal communication with Monica Barone, FAO staff member.

Bait for recreational fishing

As any extractive activity requires monitoring and management, the use of aquatic resources as bait in RF is no exception. Although trolling RF usually employed artificial baits and lures, the use of baitfish and live bait in RF was common in anchored boat and shore-base RF. For example, sardines were used to fish bluefin tuna and swordfish from anchored boats. For golden grey mullets, a special paste of fish and flour mix was used. For salema, seaweeds/alga were used and for other species sardines, anchovy, shrimps, hermit crab, mussels and squid were the common baits employed.²⁴ For this review, no quantitative data were available to estimate the scale of artificial and natural baits in Mediterranean RF. The use of fish and other aquatic resources as bait will need to be monitored throughout the Mediterranean, especially for those species at risk of overexploitation as well as those which are targeted species in other fishing sub-sectors. We must note that in Croatia a new law was adopted in 2006 prohibiting fishing with live bait (Segedin, 2006).

Catch and release in recreational fishing

Catch and release fishing, believed to be a conservation method in that fish are returned to the water alive – often through the aid of altered hooks and special release methods, was not found to be a widespread part of the Mediterranean RF culture. This may have been due in part to the fact that fish caught were often kept for consumptive purposes or are sold. A known exception was the marking/tagging programme of bluefin tuna organized in the south region of France (*Provence Méditerranée*).²⁵ Although the conservation impacts of catch and release practices are still a matter of debate within the scientific and environmental communities, the potential benefits and constraints of catch and release practices should be evaluated in the Mediterranean; particularly for big game fishing where fishing is often practiced for fun and not as a source for food.

Furthermore, ICCAT affirmed in a recommendation (06-05 BFT) that its member countries “shall take necessary measures to ensure, to the greatest extent possible, to release bluefin tuna caught alive, especially juveniles, in the framework of recreational fishing”. This was clearly an invitation to the ICCAT member countries to promote, within the angling community, catch and release of bluefin tuna.

2.2.3 Socio-economic impacts of Mediterranean recreational fisheries

At the time this review was undertaken, very few qualitative or quantitative studies attempting to evaluate the socio-economic impacts of RF existed. However, studies from other regions have shown that RF may be a non-negligible source of income for various services sectors, such as creating employment in the tourism sector (e.g. in hotels, restaurants, charters, and general services in harbours and fishing gear stores), as well as direct revenue in those sectors providing the physical inputs for RF (e.g. naval industry, bait, equipment and gear stores); not to forget the social value of the recreational activity itself (Franquesa *et al.*, 2004). Anecdotal evidence suggested that RF in the Mediterranean was of substantial socio-economic importance and that this importance is likely to increase as the tourism sector expands, ports are developed, and disposable incomes increase in the basin. The value of the sub-sector will need to be understood and placed within the context of the fishing sector as a whole (i.e. along side commercial, subsistence, aquarium, and aquaculture sub-sectors) in order to assist fisheries managers to best allocate limited resources and best develop their fisheries management frameworks. As is the case for all fisheries management, understanding the recreational fishers and the context in which they fish would contribute directly to the development of appropriate and effective management actions. For example, understanding fishers’ motivations will be as crucial in determining allocation of size and bag limits as the corresponding biological/ecological information.²⁶

²⁴ Personal communication with Marcel Ordan, President of CIPS.

²⁵ Ibid.

²⁶ For more reasons on the importance to understand anglers’ attitudes and opinions in management decision making, see Hickley and Tompkins (1998).

However, according to Ditton (1998), research into socio-economic or human dimensions of recreational fisheries [in Europe] has elicited limited interest at the management level, and in the USA and Canada these topics have been mainly limited to academic interest. In contrast, northern European countries began early on (1970) to analyze the economic value of RF for use in management.²⁷ Franquesa *et al.* (2004) explained this difference in priorities between the northern European and Mediterranean countries because, historically, northern European countries are characterized by “the highest sensibility to environment subjects, the upper economic level and the upper research capacity”.

In the Mediterranean, although both the value and the understanding of the value of RF are at a relatively under-developed stage, researchers and managers would be able to benefit from the methods in use in other regions around the world, such as those provided below.²⁸

Current economic valuation techniques can be divided into three sub-categories: 1) revealed-preference approaches (e.g. travel cost, market methods, hedonic methods and production approaches) 2) stated-preference approaches (e.g. contingent valuation, conjoint analysis), and 3) cost-based approaches (e.g. replacement cost, avoidance cost). See Box 1 for a more complete description of the various methods. The travel cost method, used extensively in the United Kingdom, United States of America and in several Nordic countries, “is based on the concept that people spend time and money travelling to a recreational site and that these expenditures, or costs, can be treated as revealing the demand for a site. Surveys of site visitors are undertaken to determine the demand for a site where visit rates are a function of travel expenditure and time, income, any entry fees, environmental characteristics and the availability of substitute sites” (Hickley and Tompkins, 1998). In France, for example, five categories of expenditures incurred by recreational salmon fishers were identified: transport, accommodation, catering, fishing equipment and fishing rights (Porcher and Brulard, 1998). Accounting for all these aspects, the average cost (or investment) per fisher of a salmon fishing season in 1995 was calculated at FF10 669 (US\$2 137). Sport fishermen’s total expenses spent, within the Department, were FF6 500 000 (1995) (US\$302 219).

In the northern European countries, the report “Economic Value of Recreational Fisheries in the Nordic Countries” (Toivonen *et al.*, 2000) presented the results and methodology used to estimate the total economic value (TEV) of recreational fisheries in Denmark, Finland, Iceland, Norway and Sweden. The parameters used in this study were the total expenditures for recreational fishing and the market value of the catch (See Box 1 for results). Such estimates would allow for loose comparisons between commercial and recreational fisheries, such as those provided in Box 3.

In the Mediterranean, few countries had undertaken such evaluations. Known exceptions were evaluations of recreational tuna fishing in France²⁹ and Italy (SFITUM, 2004), a Spanish survey of the entire boat-base marine RF (SFITUM, 2004), and a study in Cyprus (Stephanou, 1980).

²⁷ See, for example, Toivonen *et al.* (2000).

²⁸ For a review of RF surveys methods, see Ocean Study Board (2006).

²⁹ Results were not available.

Box 1. Economic valuation techniques for recreational fisheries

Current economic valuation techniques can be divided into three sub-categories:

1) revealed-preference approaches:

Travel cost: Valuations of site-based amenities are implied by the costs people incur to enjoy them (e.g. improved sport fishing activities, fishing tour).

Market methods: Valuations are directly obtained from what people must be willing to pay for the service or good (e.g. ecolabelling price differentials, increased value of a fishery).

Hedonic methods: The value of a service is implied by what people will be willing to pay for a service through purchases in related markets, such as housing markets (e.g. recreational vessel purchases, housing purchases on coastal areas and waterfronts).

Production approaches: Service values are assigned from the impacts of those services on economic outputs (e.g. increased efficiency from bycatch reduction methods, improved CPUE in a fishery).

2) stated-preference approaches:

Contingent valuation: People are directly asked their willingness to pay or accept compensation for some change in ecological service (e.g. coastal reef preservation, endangered species protection).

Conjoint analysis: People are asked to choose or rank different service scenarios or ecological conditions that differ in the mix of the conditions (e.g. MPA with varying levels of permitted human activities).

3) cost-based approaches:

Replacement cost: The loss of a natural system service is evaluated in terms of what it would cost to replace that service (e.g. alternative coastal livelihoods).

Avoidance cost: A service is valued on the basis of costs avoided, or extent to which it allows the avoidance of costly averting behaviours, including mitigation (e.g. participatory fisheries management reduces conflicts, health benefits of fish products).

Source: Farber et al., 2006.

Notes: Examples have been changed to reflect fisheries aspects.

Box 2. Economic value of recreational fisheries in Nordic Countries in 2000

Total annual fishing expenditures in national currencies, excluding long-lasting equipment such as fishing tackles and boats (2000)

Countries (currency unit)	number of observations	Money spent on recreational fishing (mean/ fisherman)	Money annually spent on recreational fishing (estimated total)
Denmark (DKK)	534	1 170	517 000 000
Finland (FIM)	1 183	930	1 220 000 000
Iceland (ISK)	262	35 900	1 950 000 000
Norway (NOK)	1 108	1 340	1 850 000 000
Sweden (SEK)	1 179	1 470	2 730 000 000

Total economic value of recreational fisheries, two estimates using the contingent valuation method (millions)

Country (currency unit)	Use value (1)*	Non-use value (2)**	Total economic value (3)= (1)+(2)
Denmark (DKK)	248	1 650	1 900
Finland (FIM)	501	493	994
Iceland (ISK)	591	1 190	1 780
Norway (NOK)	1 020	761	1 780
Sweden (SEK)	1 030	1 400	2 430

*Fishermen's extra WTP for their fishing experience

**Non-fishermen's WTP for current state of fish stocks and current quality of recreational fisheries

Note: WTP= willingness to pay.

Source: Both tables are extracted from Toivonen *et al.* (2000).

Box 3. Comparison between commercial and recreational fisheries

Country	Estimation of # of anglers		estimated value (millions)		Quantity of Fish Harvested	
	RF	CF	RF	CF	RF	CF
Finland (a)	1 900 000	2 700	46€(57.4 US \$)	17€(21,2 US \$)	38 000	88 000
Spain (b)	1 333 000 (d)	7 860	641€(796 US\$)	433€(537,6 US\$ millions)	19 744	149 800
United States (c)	13 000 000	n.a.	12 000 US \$	31500 US\$	122 454	n.a.

Sources:

(a) Franquesa *et al.*, 2006.

(b) SFITUM, 2004.

(c) FAO, 2005.

(d) number of recreational fishing licences.

Note: n.a.: not available.

In Italy, the annual expenses of the whole fleet for tuna recreational fishing were estimated at approximately €42 million (SFITUM, 2004).

In Spain, the questionnaire-based survey permitted the estimation of the total annual catch for each vessel and then for the entire Spanish recreational fleet, the costs associated with each kilogram of harvested fish³⁰ and the total annual expenses of the recreational fishing fleet. According to the Spanish study, the total annual expenses of the recreational fleet varied from €34 to €45 million, the higher value includes vessel purchase expenditures.

³⁰ The costs per harvested kilogram was estimated between €81 and €129; not including vessel purchase expenses.

In Cyprus, marine boat-based RF has long been a popular activity and an estimated US\$2 million were invested in gear and boats by about 300 people (Stephanou, 1980). These data refer only to boat-based RF as data for shore-based RF were not available even though shore-based RF was thought to be the most popular mode of fishing, with several thousand participants annually (Stephanou, 1980).

Although preliminary and incomplete, these estimates are first steps in understanding the socio-economic value of RF and, when combined with biological/ecological data, could be used in more holistic and integrated management of aquatic resources. Regarding relevant economic and social information, the minimal information needs are catch declarations (including sport fishing catches [tournament] as well as daily catches [amateur and tourism]), and licence reports (e.g. number of licensed anglers). These minimal data will permit the evaluation of the fishing effort as well as the size of recreational fishing community.

2.2.4 Recreational fisheries stakeholders and their role in management

RF stakeholders (i.e. those having an interest in the development of sustainable RF), could include, *inter alia*, 1) the public authorities at both the local and national levels (e.g. port authorities and ministries in charge of fisheries management, respectively); 2) the RF fishers; 3) the federations and associations of RF fishers and charters (e.g. Fédération française des pêcheurs en mer, Federación Española de Pesca y Casting); 4) environmental associations; and 5) research institutes (e.g. IFREMER in France, MARE e RSTA in Italy). This list is by no means exhaustive and other organisms/stakeholders, such as other users of the aquatic resources and representatives from the secondary industry (e.g. the gear and tourism industries) could be included.

In terms of fisheries management, the benefits of stakeholder participation in policy and management development are becoming generally accepted within the Mediterranean. But it has been acknowledged that in the Mediterranean there was a lack of stakeholder involvement in fisheries management and poor communication and information flow between fishermen, scientists and decision-makers (CIHEAM, 2002).

However, providing for the active participation of as broad a definition of stakeholders as possible will impose certain costs on those involved in fisheries management, such as investing in education and capacity building of stakeholders, increasing information dissemination, creating fora for dialogue, and establishing legal credibility of stakeholder input into management. To assist in encouraging stakeholder participation in fisheries management, examples exist in various regions of formal and informal bodies that have been created and generally comprise representatives from various stakeholder groups with well-defined mandates, such as promoting co-operation in surveillance and law enforcement, advising on social and economic initiatives, prioritizing and implementing data collection for management, addressing specific issues (e.g. codes of conduct, catch and release fishing) and other management functions.

For example, in a 2002 European Commission (EC) Communication to the Council and the European Parliament, the Commission proposed to increase the involvement of stakeholders in the consultation process (Com (2002) 535 final).³¹ In particular, the creation of a Regional Advisory Committee for the Mediterranean was proposed, which would, according to the EC, increase the involvement of stakeholders in fisheries management. However, the inclusion of representatives from the RF sub-sector was not specified.

We must note that the Council regulation (EC) No. 1967/2006 of 21 December 2006, did not include the Commission proposition and did not mention the question of the involvement of stakeholders.

³¹ Com (2002) 535 final, Brussels 09.10.2002, Communication from the Commission to the Council and the European Parliament laying down a Community action plan for the conservation and sustainable exploitation of fisheries resources in Mediterranean Sea under the Common Fisheries Policy.

As a second example, in Canada, the Sport Fishing Advisory Board (SFAB) has been an advisory body to Department of Fisheries and Oceans (DFO) Canada on recreational issues since 1964. Primarily, SFAB is made up of representatives from the BC Wildlife Federation and independent anglers (e.g. Roderickhaig-Brown, Lee Straight) appointed by the Minister in office. Furthermore, the SFAB comprises a main committee and two sub-committees—one for the north and one for the south; regrouping representatives of local fishing interests from the two dozen local communities based advisory committees, but also representatives from provincial angling advocacy groups and recreational fishery panel representatives to the Pacific Salmon Commission. The main committee is made up of representatives nominated by the two sub-committees and representatives from primary organizations (angling) and secondary organizations (business/industry) and appointees to the Pacific Salmon Commission. In addition, SFAB has different working groups focussing on specific species groups such as groundfish.

The role of the SFAB is to discuss and advise DFO on recreational fishing plans, recreational fishery regulations, and any areas of concern to the recreational fishing community during twice-yearly meetings.³²

Such examples, and others, should be evaluated and discussed as potential participatory management mechanisms within the Mediterranean; whether at the fisheries sector level or at the RF sub-sector level, whether at a basin-wide or subregional levels, whether at species/species groups or fisheries levels, or as combinations of these depending on the context at hand.

2.2.5 Recreational fisheries policies

According to the Article 7.1.1 of the FAO Code of Conduct for Responsible Fisheries (the Code), “states and all those engaged in fishery management should, through an appropriate policy, legal and institutional framework, adopt measures for the long-term conservation and sustainable use of fisheries resources” (FAO, 1995). The Code maintains that policies adopted by countries should have as objective to maintain and restore stocks by taking appropriate management measures based on best scientific evidence available as well as on relevant economic and environmental/ecosystem factors. Measures taken should also provide for the conservation of biodiversity of aquatic habitats and ecosystems and protection of endangered species. Such shifts away from production-based policies are equally valid for RF.

Furthermore, the European Commission, in a communication to the European Council and the European Parliament (COM (2002) 535 final), affirmed that “the large number of recreational fishermen, as well as the type and dimension of fishing gears used, justify the wish to include this sector within fisheries management, both for reasons of conservation and fair application of management rules”.

Unfortunately, no RF-specific policy statements were identified during the preparation of this review. As the majority of Mediterranean countries had adopted regulation on recreational fisheries, one must assume that RF policies either were imbedded within overall fishery policies or laws or were not readily available publicly. For example, the preamble of the Spanish Order of 26 February 1999 stated that the increasing importance of recreational fisheries in coastal areas and its potential impacts on the conservation of fisheries resources justified the adoption of RF regulation. As a consequence, it was necessary to regulate RF-authorized species, to designate the prohibitions and maximal catches allowed and to adopt means of special protection for endangered or particular species. However, no specific RF strategy existed for Spain.

In Canada, authorities decided to lead a policy in which citizens were directly engaged in fisheries resource management and, on a broader scale, to promote public awareness about conservation and sustainable use of valuable fishery resources. One of the objectives was to promote public awareness

³² For more details see. http://www.pac.dfo-mpo.gc.ca/recfish/Species/SFAB_e.htm (12/02/07).

about conservation and sustainable use of valuable fishery resources. The framework was developed to provide a clear statement of the Department of Fisheries and Oceans' (DFO) roles and responsibilities in recreational fisheries, and to provide strategic guiding principles to govern how the DFO exercises its roles and responsibilities. According to the policy, the DFO had to undertake cooperative initiatives with other stakeholders. The framework was organized around five principles guiding DFO in its task to develop and implement recreational fisheries policies, programs and initiatives; of which, recreational harvesters have responsibility for shared stewardship for resource conservation and enhancement (see Box 4).

Realizing that fishing pressure on inshore fish stocks – and other associated environmental damage and aquatic habitat degradation – from recreational, subsistence and commercial fisheries was increasing, Australia, in order to prevent the decline in fish stocks and guarantee the future for recreational fishing, adopted a management policy for recreational fishery in 1992 built on a cooperation between government, recreational fishers and the wider community. The draft policy, developed by a representative National Working Group,³³ espoused five primary goals and 16 key principles for the management of recreational fishing across Australia as presented in Box 5.

Box 4. The five recreational fisheries principle guidelines of the Department of Fisheries and Oceans of Canada

1. Recreational fishing is a socially and economically valuable and legitimate use of fishery resources (DFO must ensure fishing opportunities are provided to all fishermen-commercial, Aboriginal and sport, the Department's resource management policies must consider access for recreational purposes).
2. Fisheries and Oceans is responsible for providing sustainable recreational harvesting opportunities as part of integrated management plans consistent with its policies (Conservation is considered as the first priority. Access to recreational fisheries was managed through Integrated Fisheries Management Plans based on species-specific and area-specific policies established by the Department).
3. Recreational harvesters have responsibility for shared stewardship for resource conservation and enhancement (Governments and resource users must share responsibility for conservation and for ensuring that fisheries resources are managed so that they benefit all Canadians. Sport fishing industry and recreational harvesters was encouraged to partner with government and to participate in the decision-making process to manage and protect the resource and its habitat).
4. Mechanisms for federal/provincial cooperation in areas of shared jurisdiction will be established and strengthened.
5. Fisheries and Oceans has a leadership role to coordinate policies/programmes with the federal government which relate to recreational fishing.

Source: DFO, 2001.

³³ Fishers and the recreational fishing and boating industries across the nation have provided comment on ways to refine and improve the principles set out in the draft policy.

Box 5. The Australian National Recreational Fishing Policy

Within the draft policy elaborated by a representative national Working Group in 1992, the following five primary goals and 16 guiding principles form the basis for the national recreational fisheries policy.

1. To ensure quality fishing, and maintain or enhance fish stocks and their habitats, for present and future generations as part of environmental endowment of all Australians.
2. To develop partnerships between governments, the recreational fishing community, and associated industries to conserve, restore and enhance the values of recreational fisheries throughout Australia.
3. To allocate a fair and reasonable share of Australian fish resources to recreational fishers, taking into account the needs of user groups.
4. To establish an information base at national and regional levels to meet the needs of recreational fisheries management.
5. To establish a funding base to effectively manage the nation's recreational fisheries.

The 16 guiding principles:

1. Recreational fishing should be managed as part of total fisheries resource to ensure quality fishing, and maintain fish stocks and their habitats, for present and future generations of Australians.
2. Our aquatic habitats and ecosystems are part of the environmental endowment of all Australians, and are the key to a healthy fisheries resource which requires protection, restoration and enhancement.
3. Government, in its stewardship role, must encourage and assist the community to be involved in all aspects of fisheries management.
4. Recreational fishers and the recreational fishing industry should participate in the protection and management of their fishing heritage to ensure that it is available for future generations.
5. Community consultation at federal, State/territory and local levels should be a key component of recreational fisheries management programs.
6. Recreational fishers are entitled to a fair and reasonable share of Australian fish resources taking into account long term sustainable yields; the rights and entitlements of others; and the need to optimise community returns from available stocks.
7. Recreational fishers throughout Australia should be encouraged to adopt their own Codes of Practice consistent with the goals of this policy.
8. Preference should be given to recreational fishing methods in which the fisher is present and which aim to catch target species.
9. The catching of fish for sale or profit, including barter, by recreational fishers is unacceptable.
10. Programs, consistent with the goals of this policy, which seek to increase recreational fishing opportunities.
11. Reasonable physical access to recreational fishing areas should be provided for throughout Australia.
12. Community awareness, education and enforcement programs should focus on encouraging positive changes in community attitudes to develop a stronger conservation ethic.
13. The economic, educational, health and other social benefits of recreational fishing should be widely recognized and actively promoted.
14. Fisheries management decisions should be based on sound information including fish biology, fishing activity, catches, and the economic and social values of recreational fishing.
15. Adequate funding and support should be provided to manage recreational fishing as part of integrated resource and environmental management strategies.
16. Recreational fishers should continue to contribute to the cost of managing and developing recreational fishing.

Source: Department of Agriculture, Fisheries and Forestry,
http://www.daffa.gov.au/__data/assets/word_doc/6059/nat_recfishing_policy.doc (17/02/07)

As the foundation towards sustainable RF, Mediterranean countries would be well advised to develop RF policies, which would describe the common vision for the nations' RF and provide the road map for RF management. The principles described in such policies, such as engaging in participatory management and maintaining healthy ecosystems, would then be strengthened through appropriate legal mechanisms (laws, by-laws, decrees, etc) and management strategies.

2.2.6 Legal frameworks

As mentioned above, fisheries policy is generally supported by a legal framework formalizing the processes to be followed to obtain the goals and objectives provided for in the policy. Legal frameworks often describe, *inter alia*, the rights and responsibilities of stakeholders, the institutional mechanisms (e.g. identifying the relevant authorities and management bodies at centralized and decentralized levels) related to the management of the fisheries resources, the management processes (e.g. requiring the participatory development of management plans), the decision-making processes (e.g. the use of ecological and socio-economic threshold values as trigger points for decision-making), the access regimes (e.g. requiring the use of total allowable catch limits), and the monitoring and control mechanisms.

In those countries with comprehensive RF legal frameworks (e.g. France, Greece, Italy, Serbia-Montenegro and Spain), several common elements/provisions were found such as daily bag limits, gears restriction or prohibition of sale.³⁴ In the cases where no RF legal framework existed, some countries adopted decrees or executive orders specifically regulating RF; while others included the regulation of RF within a general and comprehensive fisheries law; occasionally followed by subsequent orders or decrees specifying the application or execution of the recreational legislation provisions.

The following table shows the main RF regulations for Mediterranean countries (information was not available for Israel and Libyan Arab Jamahiriya). Few countries had adopted a special regulation only dedicated to RF (France, Greece, Italy, Spain and Turkey), but most countries had included within a general fisheries law succinct provisions of a RF regulation. However, it was often the case that these provisions missed basic management measures such as daily bag limits (Algeria, Egypt, Lebanon, Morocco and Slovenia).

³⁴ This list is not exhaustive.

Table 2. Main recreational fishing regulations in the Mediterranean countries

Countries	Main regulations affecting RF
Albania	<ul style="list-style-type: none"> • Regulation No. 1 on the implementation of the legislation on fishery and aquaculture of March 29, 2005. • Regulation No. 1 implementing the Law on Fisheries and Aquaculture of 1995 of March 26, 1997. • Law No. 7908 on Fishery and Aquaculture of April, 05 1995.
Algeria	<ul style="list-style-type: none"> • Law 01-11 of July 03 2001 on fisheries and aquaculture (Article 27). • Executive decree No. 03-481 of December 13 2003 fixing the conditions and modalities of fishery exercise. (Chapter II and Chapter VI).
Croatia	<ul style="list-style-type: none"> • Marine Fisheries Act of April 22 1997. • Regulation on licences and fees on sport and recreational fishery of December 10 1997.
Cyprus	<ul style="list-style-type: none"> • National fisheries Legislation (Fishery law-Chapter 135 and subsequent Laws from 1961 and 2005 and Fisheries Regulations of 1990 to 2005). Regulations 17(1), 17(2), 17A, 17B, 17C and 19.
Egypt	<ul style="list-style-type: none"> • Act No. 124 of August 18, 1983 on fishing, aquatic life and aquaculture.
European Union	<ul style="list-style-type: none"> • Council regulation (EC) No. 1967/2006 of 21 December 2006 concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea, amending Regulation (EEC) No. 2847/93 and repealing Regulation (EC) No. 1626/94.
France	<ul style="list-style-type: none"> • Decree No. 90-618 of July 11 1990 on the exercise of marine recreational fisheries. • Decree No. 99-1163 December 21 1999 amending Decree No. 90-618.
Greece	<ul style="list-style-type: none"> • Presidential Order No. 373 on sport-recreational fishing of 16 July 1985
Israel	n.a
Italy	<ul style="list-style-type: none"> • Decree No. 293 of April 13 1999 on the regulation of the activity of "<i>pesca-turismo</i>". • Presidential Decree No. 1639 of October 2, 1968 on Sea fishing regulation.
Lebanon	<ul style="list-style-type: none"> • Decree No. 2775 on control of coastal fishing, September 28, 1929. • Decree No. 1/126 regulating diving sport May 23, 2001.
Libyan A.J.	n.a
Malta	<ul style="list-style-type: none"> • Fishing vessels regulations of September 14, 2004 (subsidiary legislation 425.07). • Fishery regulations of May 25, 1934; April 23, 1935 (subsidiary legislation 10.12).
Morocco	<ul style="list-style-type: none"> • Dahir (law) No. 1-73-235 on marine fisheries regulation of the November, 28 1973. • Decree No. 2-61-277 of July 25, 1962. • Order No. 212-61 of July 1962. • Circular DPMA n) 6132 of June, 25 2003.
Serbia - Montenegro	<ul style="list-style-type: none"> • Law on Marine Fishery of September 24 2003 • Rulebook on method, type and quantity of fishing tools and gear that can be used in sport-recreational fishing, forms, number and contents for the sport fishing permits February 10, 2004.
Slovenia	<ul style="list-style-type: none"> • Marine Fisheries Act of June 12, 2002.
Spain	<ul style="list-style-type: none"> • Order 1999/05160 of February 26, 1999 adopted by the Ministry of Agriculture, Fisheries and food on the marine recreational fisheries regulation. • Order of July 24, 2000 amending the Order 1999/05160.
Syrian A.R.	<ul style="list-style-type: none"> • Legislative Decree No. 30 on the protection of aquatic life of August 12, 1964.
Tunisia	<ul style="list-style-type: none"> • Law of September 30, 1994.
Turkey	<ul style="list-style-type: none"> • Fishing circulars valid from 1/9/06 to 31/8/08.

n.a. = not available.

On 21 December 2006, a Council Regulation (EC) No. 1967/2006, concerning the management of Mediterranean aquatic resources, was adopted, which included several disposals on recreational fisheries. When this study was compiled, the regulation was newly adopted; so its impact on the legal framework of Member States was not measurable. However, all Member States were required to repeal any existing laws that contradicted the Regulation. Indeed, the Regulation stated that Member States had to ensure that leisure fisheries were conducted in a manner compatible with the objectives and rules of this Regulation (Article 17 par.2). The regulation should instigate major changes with regards to RF legal frameworks in the European countries. Moreover, Member States, according to

this Regulation, must inform the Commission of all measures adopted pursuant to the article 17 dedicated to the regulation of RF.

The following chapter provides a more detailed snapshot of RF legal frameworks throughout the Mediterranean countries.

3. MANAGEMENT MEASURES

According to Article 7.1.8 of the Code, “states should take measures to prevent or eliminate excess fishing capacity and should ensure that levels of fishing effort are commensurate with the sustainable use of fishery resources as a means of ensuring the effectiveness of conservation and management measures”. As recreational fisheries is a growing activity within the Mediterranean basin, some countries have adopted legislation in order to regulate and to control the fishing effort by adopting access regimes, conservation measures and monitoring provisions.

The discussion in this chapter is organized to describe typical elements/provisions of RF legal frameworks and their formal definition in legislations throughout the basin and includes 1) the regulation of access to the resources (e.g. creation of a system of licences³⁵); 2) conservation measures including prohibition of sales, limitation of tackles, determination of daily bag limits, adoption of minimal sizes, limitation of periods and grounds (e.g. MPAs), prohibition of species and adoption of various restrictions; 3) sanctions employed in cases of infractions of regulations; and 4) special disposals regarding the practice of underwater fishing, RF competitions and tourism fishing activities.

3.1 Access regimes

Under UNCLOS, the coastal states are charged with regulating the access to the marine resources within the waters submitted to their jurisdiction.³⁶ Moreover, the decline in fishing resources in many oceans and seas, and particularly in the Mediterranean, necessitates that coastal states control the access to the resource under their sovereignty by, at the minimum, adopting a licence³⁷ system. Worldwide experiences with fisheries have shown that open access systems can have important consequences. Without regulation, open access systems will lead inevitably to the overexploitation of marine resources.

Regarding commercial fisheries, all Mediterranean coastal states required that national vessels be licensed to fish within waters under their jurisdiction. According to Cacaud (2005), “in most Mediterranean coastal states, the granting of a licence in respect [to] a fishing vessel confers the licence holder a right to fish by means of the vessels”.³⁸

However, the situation was quite different regarding recreational fisheries and often there was no compulsory licensing system or, when there was one, it was not comprehensive. For example in Egypt, even if there is a RF regulation, in practice there is no compulsory licensing system. Indeed, thousands of people practice RF without licences, at least in the larger cities on the Mediterranean Sea.³⁹

A detailed listing of licence regimes by RF subcategory is presented in Appendix 1 and described in the following sections. In general, one may conclude that access regimes for RF across the Mediterranean countries were heterogeneous: some, such as Spain, use a detailed system of licences; while others, such as Italy, leave the activity open to public access. It must be noted that there was no regulation concerning licensing systems for RF at the EU level.

³⁵ See section 3.3 on Access regimes.

³⁶ See UNCLOS of 1982.

³⁷ In this study, the term “licence” covers concepts such as permit, authorization, certificate, *récépissé*, etc.

³⁸ There are some exceptions, for more details see Cacaud (2005).

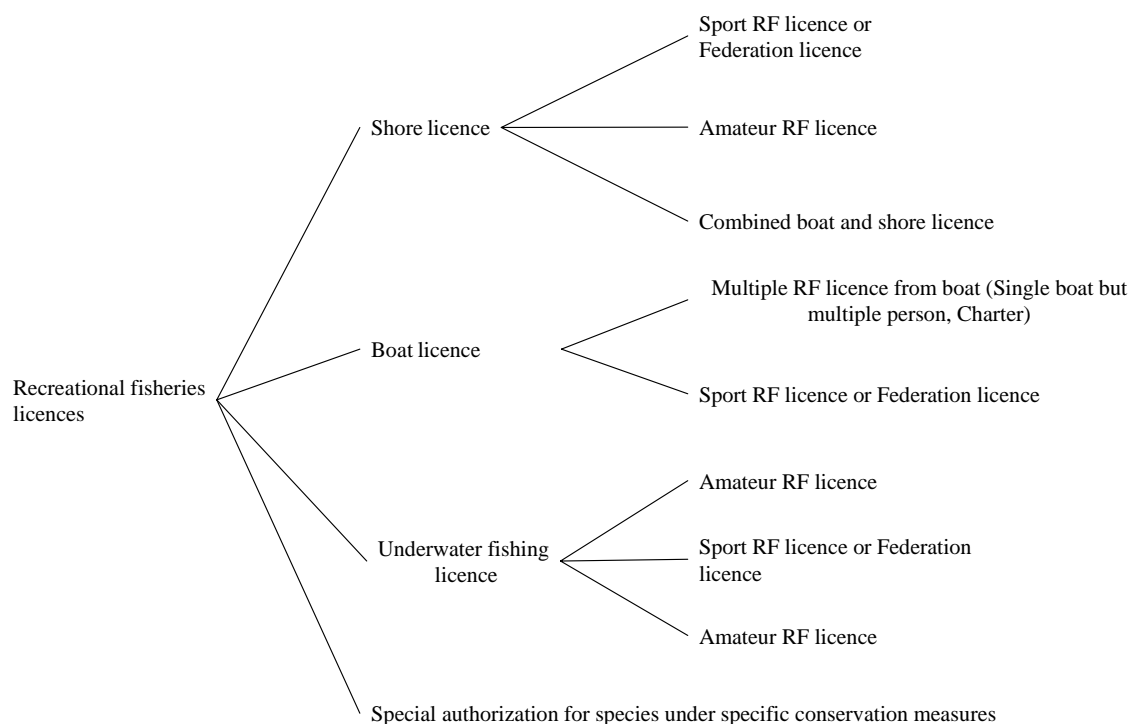
³⁹ Personal communication with Ahmed Salem from the General Authority for Fishing Resources Development of Egypt (GAFRD). When this study was compiled, the GAFRD in Egypt was planning to adopt new regulations on RF stating that all the types of recreational fisheries including shore fishing, boat fishing and underwater fishing will require a licence issued by GAFRD.

3.1.1 Categories of licences

Fishing licences are an integral part of fisheries management in that they provide a means for biological and socio-economic data collection and for managing access to and effort in the fisheries. Therefore, at least three groups of RF licences would be recommended as a minimum in the Mediterranean; corresponding to shore-base, boat-based and underwater recreational fishing. In addition, consideration of more specific licences has precedence in the Mediterranean: some countries, such as Croatia, created special permits for big game fishing and others, such as Turkey, temporary⁴⁰ authorizations for foreign tourists or non-residents. As RF may be considered a growing industry in the Mediterranean, the definition and application of licensing systems is a necessary first step toward understanding the contribution of these fisheries to the region's economies, the impacts on the resources, and the management regimes most appropriate.

For each of the licence groupings mentioned above, additional specifications of licences could be considered, such as differentiating between amateur, tourism and sport RF licences each with its own applicable regimes (i.e. who is allowed to apply and under what circumstances). Figure 2 below presents a schematic view of the various licence categories in use in Mediterranean recreational fisheries.

Figure 2. Examples of recreational fisheries licences found in the Mediterranean



Within the Mediterranean countries, Spain had the most comprehensive system of licences based on regional management: Spain required that for the exercise of marine recreational fisheries, it is obligatory to have the corresponding licence issued by the competent authority of the region where the activity is to be practiced (Article 3 par.1 of the order of 26 February 1999). Although the situation varied by region, we could identify seven categories of RF licences within the five Spanish coastal regions, as shown in Box 6 below. Without a minimum base set of licences applicable to the entire coast, the current system has resulted in a heterogeneous licensing system; warranting a review and collaboration between the region and state authorities.

⁴⁰ On temporary licence see Section 3.1.3 Duration of licence.

Box 6. Recreational fishing licences in the coastal regions of Spain

- RF licence from shore (RFL-S).¹
- RF licence from boat (RFL-B).²
- Combined boat and shore RF licence (RFL-BS).³
- Multiple RF licence from boat (single boat but multiple persons) (MRFL).⁴ This licence is issued to the owner of a boat and they permit the possessor and his accompanists to practice RF (SFITUM, 2004). This kind of licence concerns the activity of fishing charters.
- Underwater RF licence (URFL).⁵
- Federative RF licence (FRFL).⁶ This licence is required in order to take part in RF competitions (sea fishing championships) and is issued by the Regional Delegations of the “Federación Espanola de Pesca y Casting” (FEP y C).
- Sport RF licence (SRFL). This type of licence exists only in Balearic Islands and is necessary for practice from boat and from shore in official competitions and training. In practice this licence is a single document which joins together RFL and FRFL.

Notes:

¹ RFL-S is required in Andalusia but is not required in Valencia.

² RFL-B is required in Andalusia, Balearic Islands and in Valencia.

³ RFL-BS is issued in Catalonia, Valencia, Murcia and in the Balearic Islands.

⁴ MRFL is issued in Catalonia and in the Balearic Islands.

⁵ URFL is required in Catalonia, Valencia, Murcia, Andalusia and in the Balearic Islands.

⁶ FRFL is required in all the five coastal regions.

Source: SFITUM, 2004.

Other Mediterranean countries opted for general RF licence provisions. For example, the Croatian RF regulation stated that the exercise of sport and amateur marine recreational fisheries required a “sport fishing licence” which suggests that all the types of RF including shore fishing, boat fishing and underwater fishing required a licence. However, if recreational fishermen are to better understand their rights and their obligations with respect to their fishing activities, the legal framework would need to provide clear and comprehensive definitions of the various RF categories.

In reality, few Mediterranean countries’ RF regulations required a special licence by RF category (i.e. shore-based, boat-based, or underwater fishing). Only Algeria and Spain explicitly required a special licence to exercise each of these RF activities. But, at the same, only two countries (Italy and Turkey) did not adopt a compulsory licence system, regardless of RF category.⁴¹

Regarding other Mediterranean countries for which information was available, the legal requirements regarding RF licences were heterogeneous:

- Egypt, France,⁴² Morocco, and Tunisia required underwater fishing licences;
- Lebanon required a licence for RF from shore and for underwater fishing;
- Syria required a licence for RF from boat and from shore; and
- Greece and Malta issued licences for RF from boat.

In cases where licences are distributed by RF goal (i.e. amateur, sport and tourism), rather than by fishing modality, the tendency was for the existence of compulsory licences for sport fishing; while amateur RF remained open access, such as in Albania. Differences in treatment may have existed due

⁴¹ However, non-Turkish residents were required to obtain a “certificate of visiting amateur fisher” issued by the Ministry of Agriculture and Rural Affairs (MARA) valid for 2 years and costing for €75.

⁴² In France the situation is particular in that underwater recreational fishermen must pre-declare their intention to fish annually to the decentralized departments of the maritime affairs which issue a receipt (*récépissé*). People holding a licence delivered by a sports federation allowed by the Minister of the sports do not have to subscribe to such declarations.

to different impacts on the resources of the fisheries or, perhaps, to the demographic considerations differentiating these fisheries.

3.1.2 Special authorization/licences

Under certain circumstances, special authorizations were required, in addition to the RF licence, to fish species under specific conservation measures. The goal of such special authorizations is to increase control and limit the access to marine resources. Species-based licences are especially appropriate for species at risk or vulnerable to overfishing, such as those species on the GFCM priority species list.⁴³ For example, in France, fishing bluefin tuna from an anchored boat required a derogation issued by Maritime Affairs.

In addition to France, only Spain adopted a system requiring special licences by selected species. In this case, recreational fishermen were obliged to obtain special authorization for species, such as swordfish, enumerated in Annex III of the Order of 26 February 1999.⁴⁴ This example could be followed throughout the Mediterranean basin as a means to managing fishing effort; recognizing that the issuance of permits alone is not sufficient to maintain sustainable fisheries.

3.1.3 Duration of licence

The duration of a licence (i.e. whether it is renewable annually or permanent) is one of the basic elements of the access title issued to recreational fishermen. However, few countries in the Mediterranean specified the licence period in their RF regulation. As stated in the Serbian RF regulation, the permit for sport or amateur fisheries can be permanent or temporary.⁴⁵ Additionally, in Croatia, the licence for sport and amateur fishing can, upon a payment of a fee, be issued for one-day, three-day, one-week, one-month or one year period. A one-year licence is issued only for Croatian war invalids and Croatian and foreign citizens with a permanent residence having a membership in the Croatian Union for Sport Fishing or the Croatian Diving Union. A special sport and amateur fishing licence for big game fishing is also available for a 30-day period. Slovenia also adopted two different licence lengths: one for sport and underwater sport fishing licences and one for amateur fishing licences. The amateur fishing licence is a weekly or a daily ticket; while, the sport and underwater licences are valid for one year if the person is member of a sport marine fishing organization. In Spain, the validity of the different types of licences varied from one region to another but globally the duration is three years as for the special authorization for particular species issued to boats owners.⁴⁶ In Morocco, shore based licences were valid for 6 months and were free; whereas underwater licences were issued annually and at a cost of 25 euros.⁴⁷

3.1.4 Licence fees

In contrast to many commercial fisheries, recreational fishing is generally considered a *privilege*, versus an innate *right*. Therefore, globally the use of licence fees tends to be common practice in RF. In addition, Recreational fishermen are often considered to be sensitive to the environment in which they fish and the need to manage aquatic resources. Therefore, they tend to be aware of the potential uses of licence fees regarding RF management and ready to contribute to the conservation of marine resources and its ecosystem. According to Kramer (2006), salt water fishing licences could generate,

⁴³ SAC Priority species list (Rome, 2006).

⁴⁴ Spain: Art. 3 of Order 1999/05160 of 26/02/1999. Species enumerated are: *Thunnus thynnus*, *thunnus alalunga*, *thunnus obesus*, *xiphias gladius*, *makaira* spp., *tetrapturus* spp., *istiophorus albicans*, *merluccius merluccius*.

⁴⁵ Art. 19 of the law on Marine Fishery of 2003.

⁴⁶ Example: In Catalonia, RFL-BS can be for 1, 2, 3 or 4 years, URFL is for 1 year. In Murcia, the general RFL-BS is valid for 5 years, the URFL is valid for 3 years and it also exists a kind of licence for minor between 10 and 15 with parental authorization valid for 1 year. In Valencia, RFL-BS over 16 years is valid for 5 years and is unlimited duration for people over 60 years old, URFL is issued for 2 years.

⁴⁷ Personal communication with Malouli Idrissi, INRH Centre Régional Tanger

among other things, funds to support research, to support law enforcement, to support stock enhancement and to increase the anglers' role in management as they paying for management services.

Little information was generally available on licence fees within the Mediterranean countries having an RF licence system. Also lacking was information on the criteria used to determine the amount of the fees and the use of fee-related funds. Transparency in the use of such funds would tend to increase participation in the licensing system.

In Croatia, it is interesting to note that 40 percent of revenues arising from the selling of licence through the union are to be used in financing marine protection projects or other defined goals approved by the Ministry.

In the Serbian RF regulation the fee is defined by the competent authority of local self-management, depending on the validity period of the permit and age structure of sport fishermen.⁴⁸

In Spain, the fee varied in function of different criteria (e.g. length of the boat, age of the angler). For example, an individual licence, valid for three years, cost ten euros but was free for those under 18 years or over 65 years. Boat licences for vessels less than six metres cost 30 euros, whereas it cost 55 euros for boats more than six metres. Collective licences for charter boats cost 300 euros per year.⁴⁹

The article 65 of the Egyptian Law on fishing, aquatic life and aquaculture provided that licence fees should not exceed 50 cents for one day (€0.066), five Egyptian pounds for one month (€0.66), and 20 pounds (€2.64) for an annual licence.⁵⁰

3.1.5 Licence transferability

In theory, fishing licences could be transferable from one individual or group to another. Regarding commercial fishing licences, generally the transfer of the licence, when it is allowed, is subject to an authorization emanating from the relevant institution and is permitted only under certain circumstances. Regarding RF in the Mediterranean, little information was available regarding the transferability of RF licences.

3.1.6 Licence eligibility restrictions

Regarding the potential eligibility requirements surrounding an RF licence, few Mediterranean countries fisheries legislations specified who can be issued such licences and under which conditions.

When specified, the licence was linked to individual fishers but was occasionally collective, as was the case in Spain's multiple RF licence attached to single boats. In other cases in the Mediterranean, the licence was bound to a group of individuals independently from the boat. For example, in Albania, the licence of sport fishing with a sailing boat may be given to sport fishing associations or to interested persons who satisfy some preset conditions.⁵¹ The case of Albania is particular in the sense that the licence was issued to associations or organizations; whereas, in most of the Mediterranean countries the licence was linked to an individual.

In fact, some of the Mediterranean countries with underwater RF regulations (Algeria, France, Greece, Lebanon, Serbia and Tunisia) submitted licence issuing to strict conditions, such as age limit, presentation of medical certificate and of an insurance contract.⁵² Algeria,⁵³ France, Greece, Serbia and

⁴⁸ Article 19 of Law on Marine Fishery of 2003.

⁴⁹ Information collected during personal communication with Estaban Graupera the IGFA Representative for Spain and President, Federación Mediterránea para una Pesca Responsable

⁵⁰ When this study was compiled, Egypt was planning to adopt new articles regulating recreational fisheries in the Fisheries law increasing the amount of the recreational fisheries licences fees.

⁵¹ Paragraph 3 of the Article 56 of Fisheries Regulations No. 1 of 1997.

⁵² See for example Art. 66 of the executive decree No. 03-481 of 13/12/03 of Algeria.

Tunisia limited the exercise of underwater fishing to those over 16 years of age. In Lebanon the minimum age limit is fixed at 18 years old.

As mentioned previously, some Mediterranean countries authorized non-residents and foreign tourists to practice RF. In Lebanon, foreign tourists were permitted to practice underwater fishing under the condition that they belonged to an international club and obtain the required certificate.⁵⁴ In Turkey, although there was no compulsory licence system, non-Turkish residents need to be issued a “certificate of visiting amateur fisher” issued by the Ministry of Agriculture and Rural Affairs (MARA), valid for a 2-year period. Foreign tourists were permitted to perform shore-based recreational fishing without a licence but any boat-based RF by a foreign tourist required a fishing tourism certificate and a fishing stamp (valid for 3 days).⁵⁵ In Morocco, non-residents and tourists did not need to pay a licence to practice underwater recreational fisheries.

In the Spanish region of Catalonia, RF underwater licences from other EU Member States were valid for use within waters under jurisdiction of Catalonia. It is possible that, given homogenization of licence requirements and taking local resource issues into account, the EU Member States could devise a system of mutually recognized RF licences.

Finally, we can note that, in most cases, individuals requesting a sport or underwater RF licence were required to be members of a sport marine fishing organization.

3.1.7 Licence issuing institution

In general, the relevant legislation identifies the level of devolution of powers and the competent institution for issuing RF licence, whether falling within the mandate of national ministries or local-level governments and whether within the fisheries, environment, tourism, or other departments.

Regarding the countries in which information was available, Five countries (Algeria, Croatia, Cyprus, Egypt and Lebanon), gave the power of issuing RF licences to the responsible fisheries administration at the national level (e.g. Department of Fisheries and Marine Research, Ministry of Agriculture-Department of Fisheries & Wildlife⁵⁶); four countries (Greece, Serbia, Slovenia and Spain) charged the local authorities with this duty.

3.2 Conservation measures

This section examines the various conservation measures adopted by the Mediterranean countries to make recreational fisheries sustainable in accordance to basics principles of rational use of marine resources. They included traditional measures, used also for commercial fishing management, such as limitation of fishing gears, determination of catch limit sizes, prohibited species, and specific measures proper to the recreational fisheries, such as adoption of daily bag limits and prohibition of sale. A complete listing of measures by country is presented in Appendix 4, and are summarized in Table 3 below.

⁵³ Art. 66 of the Executive Decree No. 03-481 of 13/12/03, Art. 4 of Decree No. 99-1163 of 21/12/1999 modifying Decree No. 90-618 of 11/07/90, Presidential Order No. 373 on sport-recreational fishing of 16 July, 1985 and Art. 22 of the Law on Marine Fishery of 2003.

⁵⁴ Art. 2 of Decree No. 347, 11 December, 1972.

⁵⁵ Shore-based RF is free of charge (neither a certificate nor permission is required).

⁵⁶ In Lebanon, according to Decree No. 1/126, the Ministry of Agriculture granted annual licences for scuba divers (Article 2) whereas Article 4 mentioned that the Department of Fisheries and Wildlife issued speargun licences.

Table 3. Management measures in use for recreational fisheries in the Mediterranean countries

Countries	Prohibition of sales	Limitation of fishing modalities and tackles	Limit of catches	Minimum lengths or weights permitted for particular species	Forbidden species	Prohibition of fishing in protected areas period	Other general prohibitions for RF
Albania		X	X	X	X	X	X
Algeria	X			X			
Croatia	X	X	X	X			
Cyprus	X	X	X				
Egypt		X		X			
European Union	X	X			X	X	
France	X	X	X	X	X	X	X
Greece	X	X	X	X	X		X
Israel				X			
Italy	X	X	X	X	X		X
Lebanon		X		X	X		
Libyan A.J.							
Malta⁵⁷		X		X	X		X
Morocco	X		X			X	
Serbia - Montenegro	X	X	X	X	X		X
Slovenia	X	X					
Spain	X	X	X	X	X	X	X
Syrian A.R.	X						
Tunisia	X	X	X	X	X		X
Turkey	X	X	X	X	X	X	X

Note: A detailed listing of measures is provided in Appendix 2 of this report and additional measures for sport fishing and underwater fishing are described in Section 3.5.

⁵⁷ The information for Malta is from the Fishery Regulations of May 25, 1934 and April 23, 1935, which did not specify recreational fisheries. Without explicit mention, we can only assume that regulations apply both to commercial and recreational fisheries.

3.2.1 Prohibition of sale

To differentiate RF from commercial fisheries, RF regulations generally prohibit the sale of RF catches/landings. Most of the Mediterranean countries with specific RF regulations prohibited the sale of catches.⁵⁸ Examples of which included the following:

- Algeria, the Decree No. 03-481 of 13 December 2003 in article 62 specifies that the product of the RF cannot be sold, exchanged or purchased; catches may be used only for self consumption.⁵⁹
- Croatia, Art. 33 of the Marine Fisheries Act of 1997: “Fish and other marine organisms caught while conducting sport and recreational fishing activities may not be put on the market”.
- Serbia, Art. 21 of the Law on Marine Fishery of 2003: “A natural person engaged in sport-recreational fishing must not sell or exchange its catch”. Idem for France, Greece, Italy, Portugal, Slovenia, Spain, Turkey.

However, the restriction on sales of RF catches was not consistent throughout the Mediterranean countries and has been cited as a source of conflict among the fishing sub-sectors (GEM-UB, 2005). Furthermore, the sale of RF catches was often a socially accepted practice in most of the Mediterranean countries, regardless of legal restrictions.⁶⁰

Some Mediterranean countries adopted derogations to the sales restrictions for catches from sport fishing contests/competitions; albeit under strict conditions. For example, in Spain, where the sale of catches from RF was generally forbidden, selling of competition catches was allowed but the revenues from such sales were required to be donated for social or charitable purposes (Art. 9 of Decree 69/1999 of June 4 modified in 2002 by Decree 61/2002).⁶¹

Regarding EU countries, a council regulation was adopted on 21 December 2006, which stated, in Article 17 on leisure fisheries, that “Member States shall ensure that catches of marine organisms resulting from leisure fisheries are not marketed”. The regulation allowed an exception, “the marketing of species caught in sportive competitions may be authorized provided that the profits from their sale used for charitable purposes”. [As the regulation is directly applicable in the legal order of Members, countries do not need to transpose it as for the directive]. But the national regulations which do not conform to the communitarian regulation become inapplicable; states have to make their legislation conform to EU law. Moreover, the European regulation creates obligations to the States as well also rights to private entities and people. Anglers, or whosoever, could bring before the Court of Justice of the European Communities a claim that the regulation on recreational fisheries be applied in the case where they deem the State has failed to do so.

ICCAT mirrored the EU recommendation by stating in its Recommendation 06-05 BFT that the sale of bluefin tuna caught in amateur⁶² fishing as well as in sport fishing competitions was prohibited except for charitable purposes.⁶³

⁵⁸ When this study was compiled, Egypt was planning to adopt new articles regulating recreational fisheries in the Fisheries law including the strict prohibition to the sale of RF catches which may be used only for self consumption.

⁵⁹ Article 62: « le produit de la pêche récréative est destiné à l’autoconsommation. Le produit de la pêche récréative ne peut être colporté, exposé à la vente, vendu sous quelque forme que ce soit, échangé ou acheté en connaissance de cause ».

⁶⁰ See, for example, SFITUM (2004).

⁶¹ In Portugal, trophy fish must be donated to charity institutions and the fisher can keep only 10 kg for personal consumption (Portaria No. 868/2006 of 29 August 2006).

⁶² Term used in the recommendation is recreational.

⁶³ This provision was also included in another ICCAT recommendation (Rec. 04-12) on measures concerning sport and recreational fishing activities in the Mediterranean Sea.

3.2.2 Limitations on fishing modalities and tackles⁶⁴

Restrictions on gear types is an often used technical measure employed to avoid increases or to decrease fishing capacity as well to minimize undesirable impacts of such fishing on species or habitats. It has been recognized that “gear restrictions have an important role to play in making optimal use of a stock or a resource” even if, when used alone, they do not ensure sustainability (FAO, 1997a).

RF differs from commercial fisheries as high catch volumes and profits are not supposed to be a goal of RF; therefore, recreational fishermen are often excluded from using commercial fishing gears. In line with this logic, most legislation in the Mediterranean prohibited the carrying on-board and the use of commercial fishing gears in RF.⁶⁵ Furthermore, some regulations contained blanket restrictions regarding the type and the amount of gears which can be used by recreational fishermen. Other legislations were less proscriptive and left the duty to the relevant Minister to determine the manner, type and quantity of fishing gear and equipment which can be used in the RF activities.⁶⁶

There were no standards among the Mediterranean countries regarding the quantity and the type of fishing gears permitted in RF. For example, in France, the number of fishing traps was limited to two; whereas in Italy, up to six fish traps were authorized. Lebanon allowed shored-based recreational fishermen to carry only one fishing rod with a maximum of two hooks⁶⁷ but other countries had no such restrictions.

As the reasons for these restrictions and differences in restrictions were not readily available, it was not possible to propose movement toward basin-wide norms. However, it may be conceivable to adopt, by consensus at the Mediterranean level, certain gear limitations with respect to specific, high-risk species. At a minimum, the Mediterranean countries should consider adopting requirements in force in other fisheries sub-sectors to provide for consistency across the fishing sector.

Regarding RF boats, some countries restricted boat-based RF activities to boats registered as recreational vessels. However, exceptions were common in the use of commercial fishing boats in sports fishing;⁶⁸ in which cases, commercial boats would not carry any commercial fishing gear on board or pursue any commercial fishing activities. Further exceptions existed in that some countries allowed for gear type and quantity exceptions during fishing competitions. For example, in Spain, the region of Balearic Islands authorized the use of commercial traditional gears and tackles during some competitions.⁶⁹ The Mediterranean countries will need to regulate the use of commercial fishing boats and gears for RF by defining the conditions and restrictions required during their use in RF activities.

At the European level, the Council Regulation (EC) No. 1967/2006 stated in Article 17 Paragraph 1 that “the use of towed nets, surrounding nets, purse seines, boat dredges, mechanised dredges, gillnets, trammel net and combined bottom-set nets shall be prohibited for leisure fisheries” (i.e. recreational fisheries). According to this regulation, the use of [commercial] longlines for highly migratory species was also prohibited. As this regulation was recently adopted when this report was drafted, EC Members States had not already modified their regulation appropriately. ICCAT had also adopted provisions on gears restrictions regarding amateur⁷⁰ and sport fishing (Rec.04-12) in which ICCAT member countries shall take the measures necessary to forbid the use within the framework of sport

⁶⁴ The regulation of fishing gears used by underwater recreational and sport fishermen are discussed in section 3.5.1.

⁶⁵ See for example, Spain (Article 11 of O.26/02/99, O.24/07/00), Albania (Art. 58. Par.1.c of Fisheries Regulations No. 1 of 1997), Portugal (Portaria no868/2006 of 29 August 2006).

⁶⁶ See for example, Art. 35 of the Marine Fisheries Act of Croatia of 1997, Art. 26 of the Law on Marine Fishery of 2003, Art. 28 (6) of the Marine Fisheries Act of 2002 of Slovenia.

⁶⁷ Decree No. 2775 of 28 September 1929 of Lebanon on Control of Coastal Fishing. Normally an annual fee of LL1 000 is levied on each fishing gear except for shore fishing which is exempted from any fees.

⁶⁸ In Spain, the renting of commercial fishing boats during competitions was practiced. The new legislation adopted by Portugal the 29 August 2006 forbade the use of commercial vessels in RF except in the case of fishing competitions where there are no alternatives and only if authorized by the port authorities (Portaria No. 868/2006 of 29 August 2006).

⁶⁹ We found divergent opinions on this affirmation, source: personal communication with Esteban Graupera, IGFA representative for Spain and President, Federación Mediterránea para una Pesca Responsable.

⁷⁰ ICCAT used the term recreational.

and amateur fishing of towed nets, encircling nets, seine sliding, dredgers, gill nets, trammel net and longline to fish for tuna and tuna-like species, notably bluefin tuna, in the Mediterranean Sea.

3.2.3 Catch limits/daily bag limits

Catch limitations, often in the form of daily bag limits expressed in number of specimens or total weight, are one common tool in fisheries management to help maintain sustainable fisheries. Many Mediterranean countries with RF regulations had specified daily bag limits for RF.⁷¹

At the international level, ICCAT stated in its recommendation 06-05 BFT that ICCAT member countries shall take the necessary measures to prohibit the catch and retention on board, transshipment or landing of more than one piece of bluefin tuna in each sea trip. However, this provision is valid only for amateur fishing.

Some countries⁷² had adopted a global daily bag limit including all the species of fish or other marine organisms. However, these global limits often incorporated certain exceptions: some included exceptions for single fish heavier than the determined limit⁷³ or during fishing competitions⁷⁴ or both.⁷⁵ In contrast, some countries, in addition to the global daily bag limit, adopted other more restrictive limits for certain species.⁷⁶

Spain differentiated between the daily limits for shore- and boat-based RF (5 kg/licence and 25 kg/boat, respectively). Furthermore, Spain adopted daily catch limits for specific species as conservation measures. For example, only four fish per licence for each species of Albacore, patudo and hake species could be caught from shore-based RF activities.⁷⁷ In addition, bluefin tuna and swordfish were subject to particular conservation measures at both national and regional (sub-national) levels.⁷⁸ A special authorization from the regions was also required for fishing this species. Cephalopod, sea urchins and razorfish were submitted to particular daily catch limits only in two Spanish regions.⁷⁹ The Spanish examples raise an interesting point regarding regulations at various jurisdictional levels. In theory, differing limits pose no contradictions as long as the minimum standards are set at the national level with sub-national restrictions being at least as restrictive as the national legislation. Such examples may prove useful at the Mediterranean basin level.

In Greece, the daily bag limit varied with the type of fishing gear used: no more than 10 kg/day by net and trawl lines and no more than 5 kg/day with other fishing gears.⁸⁰ Like Spain, Greece adopted conservation measures regarding the daily catch limits for certain species.

France did not adopt a global daily bag limit but specified a catch limit for tuna fish, in which it was prohibited to fish more than 25 kg or one piece of tuna fish when the weight of a single sample exceeds this limit. The competition organizers may request a special authorization to exceed this quantity.⁸¹ Italy, in addition to a global daily bag limit of 5 kg, authorized only one piece of grouper per day and

⁷¹ Algeria, Cyprus, Egypt, Israel, Lebanon, Slovenia, Syria and Tunisia did not determine daily bag limits. However, when this study was compiled, Egypt was planning to adopt new articles regulating recreational fisheries in the Fisheries law including daily bag limit for recreational fishing expressed in number of specimens or total weight.

⁷² Albania, Croatia, Greece, Italy, Portugal, Serbia-Montenegro, Spain and Turkey.

⁷³ Albania, Croatia, Greece, Italy and Serbia-Montenegro.

⁷⁴ Croatia, France, Serbia-Montenegro and Spain.

⁷⁵ Croatia, France, Serbia-Montenegro and Spain.

⁷⁶ France, Greece and Italy.

⁷⁷ In Balearic Islands 5 Albacore can be caught.

⁷⁸ For example, for bluefin tuna > 81 kg, only one piece per licence and three pieces per boat (same at national and regional level). For bluefin tuna 30 – 80 kg, two pieces per licence and six per boat. Article 3 of the Order of 14/06/00 which modifies the Order of 26/02/99.

⁷⁹ In the Balearic Islands, only ten pieces of cephalopods can be caught and 50 pieces of razorfish per licence. In Andalusia it is prohibited to catch cephalopod and sea urchins.

⁸⁰ Presidential Order No. 373 of 16 July 1985.

⁸¹ Art. 1 of the Order No. 506 of 26/8/1994.

3 kg of mussels.⁸² In a similar vein in Turkey, the daily bag limit was set at 5 kg/day but number limits were set for specific species (e.g. maximum of one swordfish, three groupers, three common dolphinfish, one bluefin tuna and one albacore).

Regarding the exceptions authorized during sport RF, Croatia, Spain and Serbia-Montenegro temporarily abandoned existing bag limits. Such a practice, if not monitored, could have large impacts on the targeted species and increase the risk of conflicts with other fisheries sub-sectors targeting the same species.

One should also note the merits of flexible catch limits, which would allow authorities to adapt limits as scientific information suggests necessary. One example of such institutionalized flexibility existed in Serbia-Montenegro where the global daily bag limit of 5 kg may be reduced on request from the competent scientific institution.⁸³

Although such individual catch quotas are becoming standard management tools in the Mediterranean, only one case has been identified where a global limit (total allowable catch [TAC]) was set for the RF sub-sector as part of the TAC for the entire capture fisheries sector: Italian bluefin tuna (see Box 7).

Box 7. Italian decree of 5 April of 2006 on the distribution of the national bluefin tuna quotas

The EC Council Regulation n. 51/06 of 22 December 2005 set the total allowable catch (TAC) for Italy for bluefin tuna at 4 880 tonnes in 2006. Italy divided the 4 880 tonnes TAC among the various fishing sub-sectors, as follows:

Longlines	488.00
Purse seine	3 763.76
Sport fishing	170.80
Trap	219.60
Others	244.00
Total	4 886.16

Note: No definition was provided for sport fishing in the Italian Presidential decree No. 1639/1968.

3.2.4 Protection and conservation of juveniles

The establishment of minimum landing sizes remains an essential means of allowing juveniles to mature and to reproduce.⁸⁴ In fact, minimum size and maturity restrictions reduce fishing mortality on life stages of stocks which are considered to require special protection.

The GFCM underscored the importance of this issue, as may be seen in its Recommendation 2002/1; stipulating that small pelagic stocks be harvested after first maturity. ICCAT had also affirmed within its recommendation 06-05 BFT that member countries “shall take the necessary measures to ensure [...] the release of bluefin tuna caught alive, especially juveniles, in the framework of amateur and sportive fishing”.

Minimum sizes/weights and protected zones are equally applicable to commercial and recreational fisheries; so each sub-sector may benefit from the scientific information available concerning species life-cycles. As is the case for commercial fisheries, sensitization of fishers regarding protective measures is a key element for their effective implementation.

⁸² Ministerial Decree 10th April 1997 and Art. 142 of Art. 128 bis of DPR 1639/38.

⁸³ Art. 21 of the Law on Marine Fishery of 2003.

⁸⁴ Com (2003) 589 final.

Most of the Mediterranean countries⁸⁵ had adopted particular provisions regarding the length or the weight limit for specific species valuable for both commercial and recreational fisheries; even if these measures were not formally provided for in the RF legislation. A listing of minimal sizes by species by country is presented in Appendix 3.

Several regulations adopted by the EC included the minimum sizes of certain species of fish, molluscs and crustaceans⁸⁶ and particular minimum sizes or weights for swordfish, bluefin tuna, yellow tuna and for bigeye tuna.⁸⁷ The Council regulation 1967/2006, adopted in December 2006, included provisions on minimal sizes within its appendix III but did not mention the EC regulation proposal 589/2003 to change the minimal size of swordfish in the Mediterranean to 110 cm. For the species included in Appendix III, EU Member States will be required to adopt (if not already existing) relevant national legislation stipulating the sizes and weights permitted in the fisheries (for RF as well as commercial fisheries). Spain, which had adopted the Royal Decree 560/1995 of April 7 concerning minimum sizes for specific species based on an earlier version of the EC minimum size lists, complemented the EC list with other species, three of which have been included in the new EC regulation.⁸⁸ However, according to SFITUM (2006), the adopted minimum sizes at EU level were under the size of maturity. Also, Italy⁸⁹ and France⁹⁰ had adopted minimum size lists comprising additional species to those on the EC regulation; in the case of France, different larger minimum sizes from the EC regulation for mullet and couch's seabream. The adoption of more restrictive limits at the national level is in line with EU policy as the EU provides minimum reference size limits to its Member States.

In Turkey, in accordance with its Law 1380, MARA publishes and announces fishing circulars every year in order to regulate the recreational and commercial fisheries. These circulars included a list of species with the minimum sizes and the daily bag limits. Most of the species and sizes are related to those listed in the EU list; however, the Turkish list included some important species not included in the EU list, such as turbot, blue fish, albacore, common dolphinfish and atlantic mackerel. Furthermore, Turkey adopted more restrictive limits for the bluefin tuna (>90 cm) and swordfish (>130 cm).

Regarding the non-EU Mediterranean countries that had adopted fish size regulations, there are some significant differences from the EU regulations. In general, the minimal sizes adopted by Israel and Lebanon tended to be higher (stricter) than the EU equivalents. However, examples to the contrary existed: minimum sizes for sole size was about 20 cm (25 in the EU proposition) in the EU regulation and 16 cm in the Israel regulation. The only species for which the minimum size was almost the same in all the Mediterranean countries was for bluefin tuna according to ICCAT recommendations. When this study was compiled, ICCAT had recently adopted a resolution (BFT 06-05)⁹¹ modifying the minimal weight for bluefin tuna to 30 kg.

We must note that no maximum sizes were found within recreational regulations from Mediterranean countries, where this management measure is commonly used elsewhere for species such as lobsters.

⁸⁵ Albania, Algeria, Croatia, France, Greece, Israel, Italy, Lebanon, Morocco, Spain, Tunisia and Turkey. No information was available on the others countries to confirm whether they have or not regulation on minimal sizes.

⁸⁶ Dispositions of the Article 5.2 of the Regulation (EEC) 3094/86 of October 7, and according to the Regulation (EC) 1626/94 of the Council, of June 27, which establish several technical conservation measures for the fishery resources in the Mediterranean.

⁸⁷ Dispositions of the Regulation (EEC) 973/2001 laying down certain technical measures for the conservation of certain stocks of highly migratory species.

⁸⁸ Chub mackerel, prawn, sardine.

⁸⁹ Art. 87 of the DPR 1639/68 establishes the minimum size for each single species. Species added were albacore, European eel, Atlantic bonito, little tunny, flounder, sturgeon, great green goby, date shell, razor shell, Mediterranean mussel and oyster.

⁹⁰ Decree No. 99-1163 of 21 December 1999 and Order of 21 December 1999.

⁹¹ Recommendation by ICCAT to establish a multi-annual recovery plan for bluefin tuna in the eastern Atlantic and Mediterranean.

As mentioned above, the Mediterranean community should consider the adoption of minimum sizes and daily bag limits for priority species targeted by the RF based on the best available scientific information.

3.2.5 Prohibited species

Some⁹² Mediterranean countries (Albania, France, Greece, Italy, Lebanon, Spain and Turkey) have adopted a list of protected species strictly prohibited from harvesting due to biological and ecosystem considerations: Albania, France, Greece, Italy, Lebanon, Spain and Turkey had included in their RF regulation some provisions prohibiting the taking or fishing of particular species.⁹³

Turkey prohibited recreational fishermen from fishing sturgeon as well as other species provided for in the Turkish fishing circular.⁹⁴ Other countries, such as Albania prohibited the harvesting of certain species for both the commercial and recreational fisheries.⁹⁵ Even if it was not specified that the prohibition was applicable to recreational fisheries in the fisheries legislation, it is presumed that the prohibition is valid for recreational fisheries *a priori*. In addition, most Mediterranean countries prohibited the catching of marine mammals and turtles.

Italy forbade underwater harvesting of corals, shellfishes and molluscs.⁹⁶ Spain also prohibited the taking corals⁹⁷ and Greece,⁹⁸ Lebanon⁹⁹ and Turkey¹⁰⁰ prohibited underwater fishing of sponges. Morocco prohibited fishing groupers from 1 July to 31 August inclusive. In Malta, fishing for sponges required a licence and was allowed only under certain conditions.¹⁰¹

Moreover, some countries, such as Spain and France, banned in their RF regulation the harvesting of any species determined by EU legislation (or international treaties signed by Spain) to be prohibited species.¹⁰² In those cases where international treaties had not been specified in the RF regulation, the prohibition is only tacitly enforceable; however informing recreational fishers of international treaties is a first step toward protecting at-risk and endangered species.

At the EU level, the European Council Regulation 1627/2006 stated in Article 3 that “the deliberate catching, retention on board, transshipment or landing of marine species referred to in Annex IV of Directive 92/43/CEE shall be prohibited”.¹⁰³

3.2.6 Fish reserves

Adoption of spatial closures, such as marine reserves or marine protected areas (MPAs), and seasonal closures are common management measures in both commercial and recreational fisheries. In fact, MPAs can play a weighty role in preserving critical habitats or sensitive life stages of species.

⁹² No information has been found on prohibited species for Cyprus, Croatia, Egypt, Israel, Libyan Arab Jamahiriya, Malta, Slovenia and Syria.

⁹³ In its new legislation, Portugal prohibits taking lamprey, Atlantic salmon, shads, sturgeon, sea horses, moonfish, white shark (Portaria No. 868/2006 of 29 August 2006)

⁹⁴ Coral, dolphins, fatty fish, ocean sunfish, sea trout, brown meagre, basking shark, spider crab, sea turtle, grass carp, silver carp, sea horse, curled octopus, salmon., etc. (fishing circulars valid from 1/9/06 to 31/8/08).

⁹⁵ Sturgeons, Njila, sharks, Lopa e detit (*Mobular mobular*), Gureshpuesi (bivalve mussels) (Art. 48 par.1 of Regulation No. 1 on the implementation of the legislation on fishery and aquaculture).

⁹⁶ Art. 128 bis of DPR 1639/38.

⁹⁷ Annex II of the Order of 26 February 1999.

⁹⁸ Presidential Order No. 373 on sport-recreational fishing of 16 July 1985.

⁹⁹ Art. 5 of of Decree No. 1/126 of 23 May, 2001

¹⁰⁰ Fishing circulars valid from 1/9/06 to 31/8/08.

¹⁰¹ Fishing regulations of 25 May 1934; 23 April 1935. The sponge fishing restrictions were valid for both commercial and recreational fisheries.

¹⁰² Annex II of the Order of 26 February 1999.

¹⁰³ *Patella ferruginea*, *Lithophaga lithophaga*, *pholas dactylus*, *pinna nobilis*, *canrostephanus longispinus*. Also all cetaceans are protected.

According to Article 6 para.1 of the EU Regulation Proposal 589/2003, marine reserves are those “areas in which fishing activities may be banned or restricted in order to conserve and manage living aquatic resources or maintain or improve the conservation status of marine eco-systems”. In the case of EU members, the allowed fishing gears in such reserves must be defined by the competent authorities “as well as the appropriate technical rules which shall not be less stringent than Community legislation”.

Mediterranean countries had designated MPAs (although varying by type and objectives) and/or had adopted temporal closures to protect, in part, certain species during their reproductive period.¹⁰⁴ For example, in Spain there were three types of fishery protected areas, one of whom is marine reserves defined as “those where fishing activities could be limited or prohibited as any other activity which may alter the natural equilibrium of the environment” (SFITUM, 2004). Spain designated marine reserves creating a network of areas with different degrees of protection in which most sporting activities are forbidden. Regarding RF activities in Spanish protected areas, the RF regulation varies according to the type of reserve zoning (i.e. A, B and C \approx core area, buffer zone, and peripheral area).¹⁰⁵ However, within MPAs, competitions are always prohibited.¹⁰⁶ Similarly, in France, MPA had various status and different degrees of protection which involve different levels of state authority.¹⁰⁷ As was the case for Spain, the regulation of RF varies by zone type (i.e. A, B, C). These observations concerning variability by zone were also valid for Croatia, Greece, Italy, Tunisia, Slovenia and Turkey. Lebanon and Monaco had only designated a central zone and in Syria, for the three existing MPAs, buffer zones around the central zone were being developed.¹⁰⁸

As shown in Figure 3, the majority of 24 parks analysed¹⁰⁹ prohibited both recreational and commercial fisheries in zone A and approximately half prohibited both fisheries in zone B. Interestingly, restrictions to RF in the buffer zones (Zone C) were stricter than those to commercial fisheries (i.e. CF was not prohibited in any Zone C and benefited from open access in almost 50 percent of the Zone C).

¹⁰⁴ Spain (See.Law 3/2001, Art. 14), France, Italy (DPR 1639/68 (Art 98), L.963/65 (Art. 15), L.979/1982 (Art. 27)).

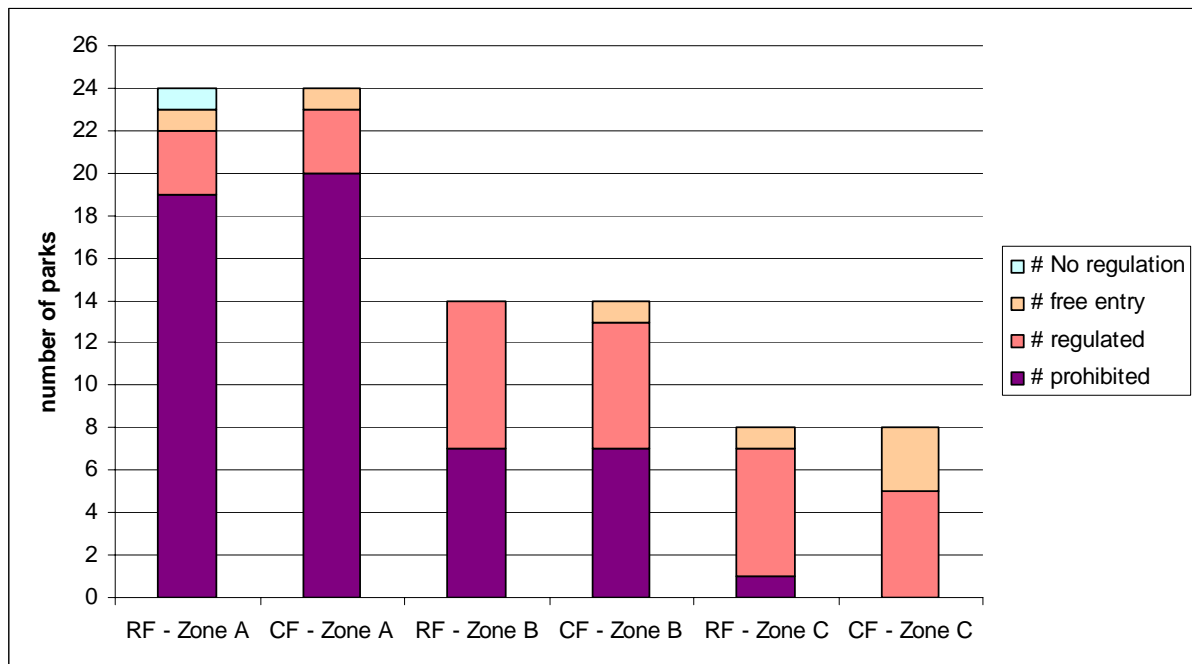
¹⁰⁵ In Zone A (Integral Protection Zone), neither professional nor RF is allowed. In Zone B (area surrounding zone B) commercial fishing is allowed (under strict conditions) and RF may be or may be not authorized. In Zone C, (surrounding Zone B), commercial fishing is authorized (but there are some measures of regulation) and RF is also authorized under some measures of regulation. Often anchoring on sea-grasses is regulated. Often, fishing gears are limited in Zone B. For example, in the Iles Medes Reserve, only one rod per licence is allowed. In Cap de Creus Reserve only rod fishing is allowed. For more precisions see SFITUM (2004).

¹⁰⁶ Personal communication with Esteban. Graupera the IGFA Representative for Spain and President, Federación Mediterránea para una Pesca Responsable.

¹⁰⁷ Marine protected areas may be included within Natural Park (region management), National Park (state management), or local reserve (Department management).

¹⁰⁸ Fanar Ibnhani, Om al Toyour and Ras El Bassit.

¹⁰⁹ The 24 parks: 1 for Cyprus, 3 for Croatia, 3 for Spain, 3 for France, 2 for Greece, 3 for Italy, 1 for Lebanon, 1 for Monaco, 1 for Slovenia, 2 for Syria, 2 for Tunisia, 2 for Turkey. This list is only a sample of the different MPAs existing in Mediterranean countries. It does not mean that Lebanon have only one Park or Spain only three. A detailed listing of those parks is presented in appendix 3.

Figure 3. Recreational and commercial fisheries zoning in 24 Mediterranean MPAs

Source: Global Directory on Marine Protected Areas in the Mediterranean elaborated by WWF.

Notes : RF-Zone A: Regulation of recreational fisheries in Zone A (core area or similar), RC-Zone B: Regulation of commercial fisheries in Zone A (core area or similar), RF-Zone B: Regulation of recreational fisheries in Zone B (buffer zone or similar), RC-Zone B: Regulation of commercial fisheries in Zone B (buffer zone or similar), RF-Zone C: Regulation of recreational fisheries in Zone C (Peripheral area or similar), RC-Zone C: Regulation of commercial fisheries in Zone C (Peripheral area or similar).

3.2.7 Temporal restrictions

Temporal restrictions are useful technical measures which help to protect components of a stock or communities such as spawning adults or juvenile stages. Unfortunately no information was available for Mediterranean countries. However, according to Marcel Ordan, president of CIPS, seasonal closures were not a widely used manage measure.

3.2.8 Other recreational fishing restrictions

Some Mediterranean countries with adopted RF regulations included measures providing for some general restrictions.¹¹⁰ They were practically equal in all the countries; therefore, only the trends regarding these general prohibitions have been discussed; noting that underwater RF was often submitted to additional restrictions as described in Section 3.3.1 of this report.

Frequently, RF was prohibited from obstructing or interfering with the activities of commercial fishing.¹¹¹ For example, in Albania, the use of spearguns was subject to area restrictions (i.e. not within 50 metres from professional gears and in marine protected areas).¹¹² As Albania, Turkey and Italy prohibited the practice of recreational fisheries activities from a determined distance from commercial fishing activities. This measure would limit the interactions between commercial and recreational fisheries.

Countries as France or Spain specified in their RF regulation that certain substances and tackles were not allowed for use in RF. In the Turkish fishing circular, for example, it was prohibited to use or carry

¹¹⁰ Albania, France, Greece, Italy, Serbia, Spain, Turkey.

¹¹¹ Albania, Italy, Serbia-Montenegro, Spain, Turkey.

¹¹² Art. 23 of Law No. 7908 of 1995 as modified by Article 6 of Law No. 8870 of 2002.

any narcotic, deadening and lethal chemicals, all types of explosives, carbide, quick lime, dazing plants, to use electric current, electroshock, liquid gas and air pressure methods for amateur fishing activities. Spain also adopted similar restrictions and well as forbidding the use of commercial gears.¹¹³ In Malta, it was forbidden to use, for fishing purposes, poisons or any other substance which acts as poison on fish. Moreover the use of lights for fishing purposes was not permitted within bays and harbours.

Finally, countries such as Italy prohibited the exercise of RF from some special areas. For example, in Greece, recreational fishermen were forbidden to fish with a boat in lagoons and farms of State and local authorities.¹¹⁴

In order to minimize conflicts with other marine resource users and to promote sustainable fishing, it is strongly recommended that similar regulations where appropriate be developed throughout the Mediterranean countries.

3.3 Special recreational fisheries regulations

This section is dedicated to the RF activities which, by their particular nature, require special regulation. Activities such as underwater recreational fishing, sport fishing (competition) and tourism fishing are subject or should be subject to a particular regulation due to the special nature of the activity itself. The specific characters of these three RF activities merited a more detailed examination of the regulations adopted for these particular forms of RF.

3.3.1 Underwater recreational fishing regulations

The majority¹¹⁵ of the Mediterranean countries with RF regulations dedicated specific regulations to underwater fishing activities. The regulations adopted were, on the whole, consistent across the countries; the major difference being the degree of comprehensives and detail of coverage. A detailed listing of the regulations is provided in Appendix 5.

At the European level, the EC Council Regulation No. 1967/2006, adopted in December 2006, obliged Member States to regulate underwater fishing with spearguns in accordance with some obligations stated in Article 8 (4) of the Regulation. Article 8 on prohibited fishing gears and practices mentioned different substances and gears which should not be used, such as explosives or toxic, soporific or corrosive substances, St Andrew' cross and similar grabs for harvesting, in particular, red coral or other type of corals or coral-like organisms. With the adoption of this regulation, the use of an underwater breathing apparatus with speargun became forbidden for fishing activities between sunset and sunrise.

As spearguns (mechanically-powered)¹¹⁶ are often used in underwater RF in the Mediterranean, some countries (e.g. France, Greece, Serbia-Montenegro and Lebanon) imposed age requirements (minimums) on the exercise of this activity. Some countries obliged the underwater fishermen to ensure that the speargun was not loaded outside water.¹¹⁷ It is interesting to note that Slovenia allowed the use of speargun for underwater sport fishing competitions; however, spearguns were strictly prohibited for use amateur RF activities.¹¹⁸

¹¹³ Article 11 of O.26/02/99, O.24/07/00.

¹¹⁴ Portugal prohibited recreational fishermen from fishing from jetties, in river mouths, in navigation channels, within 100 metres of docks, marinas, shipyards, and fish farms, in ports and marinas and from beaches and within 300 metres of the beach during the beach season (Portaria no868/2006 of 29 August 2006).

¹¹⁵ Algeria, Cyprus, France, Greece, Italy, Lebanon, Serbia-Montenegro, Slovenia, and Turkey. No information was available for Morocco and Tunisia.

¹¹⁶ Speargun fishing is also referred to as underwater gun fishing.

¹¹⁷ France, Greece, Italy, Lebanon.

¹¹⁸ Art. 29 (1) and (2) of the Marine Fisheries Act of 2002.

In order to limit fishing effort in underwater RF, the use of lights,¹¹⁹ the use of SCUBA (or other artificial breathing apparatus) equipment,¹²⁰ as well as night-time underwater RF with spearguns¹²¹ were often prohibited. Often, the targeting of crustaceans was limited to by-hand harvesting (i.e. the use of harpoons was prohibited). For example, Algeria prohibited the use of harpoons for crustacean RF as well as the use of picks or any gears susceptible to change the habitat of species.¹²²

Regarding the conservation of particular species potentially targeted by underwater RF, the harvesting of corals and sponges was frequently prohibited (e.g. Turkey and in Greece). Although gear restrictions existed for the harvesting of crustaceans (e.g. hand only harvesting), no Mediterranean country had adopted related catch restrictions. For those species highly vulnerable to overfishing, such as crustaceans and other slow moving species and benthic species, related regulations should be applied across the Mediterranean basin.

Apnoea, the holding of one's breath, is the method applied to free-diving underwater RF and is associated with several risk factors including underwater blackouts. These and other risks have led countries to mandate certain security requirements associated with underwater RF. For example, Italy obliged fishermen to indicate their position with a buoy clearly visible at least from 300 metres or, if the fisherman uses a craft, a flag on the boat and to carry on-board emergency SCUBA equipment.¹²³ Similar regulations were found in Greece,¹²⁴ France¹²⁵ and Morocco.

In order to protect commercial fishermen interests and minimize conflicts between the sub-sectors, Algeria, France, Greece and Lebanon prohibited underwater fishermen from removing marine organisms caught by nets or gears placed by other fishermen.

Finally, some countries (e.g. Cyprus, France, Italy, Lebanon and Morocco) used spatial restrictions to limit the area in which underwater RF could take place. For example Cyprus, prohibited underwater fishing in tourist areas.¹²⁶ France¹²⁷ and Lebanon¹²⁸ forbade underwater recreational fishermen to approach within 150 and 200 metres, respectively, of commercial vessels. Italy¹²⁹ prohibited underwater RF in the following areas:

- in port transit areas;
- within 100 metres from the boats anchoring outside ports;
- within 100 metres from fisheries installation; and
- within 500 metres from beaches frequented by bathers.

3.3.2 Sport fishing competition regulatory frameworks¹³⁰

Boat-based sport fishing competitions were a well-developed activity in Spain, Italy, France, Cyprus and Croatia; while underwater spearfishing competitions appeared common in countries such as Tunisia, Morocco, Egypt and Turkey. When this study was compiled, the Ministry of Fisheries and Wildlife of Lebanon was not aware of any official spearfishing competitions in Lebanon.¹³¹ In Egypt, about 250 persons were engaged in the last national competition in September 2006 in Alexandria. There was no information available regarding legal frameworks for shore-based fishing competitions

¹¹⁹ Algeria, Cyprus, France, Greece allowed the use of light for spear fishing.

¹²⁰ Algeria, Cyprus, France, Greece, Italy, Morocco, Slovenia, Turkey.

¹²¹ Some countries forbid underwater recreational fishing between sunset and sunrise: Algeria, France, Greece, Italy, Lebanon, Morocco, Serbia-Montenegro, Slovenia.

¹²² Art. 69 and 71 of the Executive Decree No. 03-481 of 13/12/03).

¹²³ Art. 130 and 128 ter of Presidential Decree No. 1639/1968.

¹²⁴ Presidential Order No. 373 on sport-recreational fishing of July 16 1985.

¹²⁵ Art 4.V of Decree No. 99-1163 of 21/12/99

¹²⁶ Regulation 17(1) and Regulation 17(2) of the National Fisheries Law.

¹²⁷ Art 4.IV of Decree No. 99-1163 of 21/12/99

¹²⁸ Art. 5 of Decree No. 1/126 May 23, 2001.

¹²⁹ Art. 129 of the Presidential decree No. 1639/1968

¹³⁰ Most of the information was from SFITUM (2004).

¹³¹ Personal communication with Samir Majdalani, Agriculture Ministry, Lebanon.

3.3.3 Competition authorizations

Under comprehensive management systems, marine sport fishing competitions, events involving the use of marine resources, would normally require authorizations from the relevant authorities. Although such requirements may have existed in all countries housing such events, affirming information was available only for Egypt, France and Spain.

In Spain, the “Federación Española de Pesca y Casting” (FEP y C) organized national competitions and also controlled the international competitions taking place in Spain. According to the article 39 of the Spanish Sport Law, authorization from the Consejo Superior de Deportes (CSD) was required for all international competitions.¹³² Regarding local competitions, federated fishing societies could organize a free (unlimited) number of local contests. In addition, as daily catch limits are generally exceeded during competitions, authorization on resource and environment must be acquired from the relevant administration.

In France, according to the Order of 3 May 1995, any nautical event must be declared to the office of Maritime Affairs by filling a form: “Déclaration de manifestation nautique”.¹³³ In addition, big game and trolling contests involving tuna catches must be declared to the FFPM.¹³⁴ After having received annually the list of planned sport fishing competitions submitted by the FFPM, the Administration of Maritime Affairs would grant permission on a case-by-case basis. Moreover, for boat-based tuna fishing competitions, the federation (FFPM) may ask the Administration of Maritime Affairs for derogation (i.e. exemption or exception) to the daily bag limit of 25 kg per person.

In Egypt, federated fishing societies could organize an unlimited number of local contests. Furthermore, several clubs have a right to organize a sport fishing contest among their member or for open participation.¹³⁵

Competition regulations

Every discipline (e.g. trolling fishing, anchored boat fishing, shumming fishing) in the Mediterranean countries had its own competition regulations; however, these regulations tended to have similar coverage of issues, if not in details. For example, in Spain, most of the competition regulations covered the following points: fishing areas, crew, boats in competitions, distance between boats, competition cancellation, fishing timetable, fishing tackles and baits, security, judges and classification. For big-game fishing¹³⁶ competitions, species and minimum lengths were also covered. In France, competition regulations were required to cover both the competition organization logistics (e.g. material means, age, conditions for championship, organisation committee, jury, cancellation) and the competition logistics themselves (e.g. length of contest, registration conditions, team composition, control, radio, boat, fishing equipment, fishing zone, prizes). For big-game competitions, the regulations were obliged to include the modalities of weighing and state the modalities of allocation and quantity of bait according to type of competition. In addition, other specific factors were required in the contest regulation valid for each competition (e.g. the list of official representatives' names, the types of contests [trolling, big game], species allowed, and minimal weight or size allowed). In both countries, participants were required to be citizens of the countries in which the competitions were taking place and to hold either (or both, for Spain) a RF licence and the licence of the federation organizing the competition (only during “official” competition). In addition, additional insurance coverage could be required of the participants.

¹³² For big game fishing, Spain Championship and King's Cup requests must be approved by the Sea Committee of the FEP y C and then by CSD (approves the timetable).

¹³³ The Declaration needs to be sent 15 days prior to the event. In special cases (special authorization are required) the declaration shall be sent two months before the event.

¹³⁴ Fédération Française des Pêcheurs en Mer

¹³⁵ Personal communication with Ahmed Salem for the General Authority for Fishing Resources Development of Egypt

¹³⁶ Big-game fishing targets large bony fish such as tuna and marlin in the open sea.

During fishing competitions, it was legally (if prescribed by the law) possible to contravene normal RF regulations. The most recurrent exception was the possibility to exceed catch limits established by the RF regulation. In Croatia, Spain¹³⁷ and Serbia-Montenegro, FM catch limits were derogated, often by un-limited values.¹³⁸ Other exemptions occurred, such as in the Spanish Balearic Islands where commercial traditional gears and tackles were permissible during sport fishing competitions. In addition, competitions could occur at night, given the appropriate authorization from the regional government. There occurred additional exceptions that were not covered by the law. For example, in Spain, it has been observed that commercial fishing vessels were rented for use in anchored boat recreational fishing contests (SFITUM, 2004). This practice appeared to be a common but not regulated occurrence.

3.3.4 Tourism/charter recreational fishing

Tourism fishing is a growing activity in Mediterranean basin albeit often overlooked or inconsistent in terms of regulations; due, in part, to the wide variety of forms and resource impacts within this category of RF. Generally, two types of tourism fisheries may be distinguished: the first is mostly known as charter fishing and the second as pesca-tourismo.

Charter fishing regulatory frameworks¹³⁹

In the Mediterranean, tourism fishing was primarily practiced through charter fishing (i.e. the renting of a fishing boat and crew for fishing expeditions). In theory, any individual, agencies or other organizations leading charter fishing expeditions organizing a charter fishing activity should possess a licence; however few Mediterranean countries required such licences.

In Turkey, however, two-year permissions for recreational marine fishing tourism were given to tourism agencies, organizations and guides engaged in recreational marine charter fishing. The issuance of the permission certificate required these agencies and organizations to employ a guide (skipper). Currently, in Turkey, increasing demand for charter fishing permissions has been noted. Unfortunately, while waiting for their certificate, the agencies may not hesitate to organize fishing tours without permission.¹⁴⁰ In two coastal regions of Spain, a charter fishing licensing system was established; but such systems were rare in the Mediterranean countries.¹⁴¹

Charter skipper requirements

Charter fishing skipper requirements varied from a country to another, when they existed. Most of the time as the Mediterranean country did not have a regulation on charter activity; there were no particular requirements concerning the skipper. In Spain, the navigation qualifications required to pilot a charter boat were the strictest and provided rights confined to charter fishing.¹⁴² Unfortunately, the restricted conditions to pilot a charter boat prompted the renting of charter boats without the skipper or to contract skippers from other countries with more lenient requirements;¹⁴³ raising the need for realistic and homogenous legislation. In opposition, in France, the lower professional qualifications were required.¹⁴⁴ In Croatia, fishing charter boat could get their status only if their owner was a professional fisherman (Segedin, 2006). So the skippers spent a part of the year serving domestic and foreign recreational fisherman, and the rest of the year fishing as commercial fisherman.¹⁴⁵ Charter

¹³⁷ In Spain, permission was required to surpass the legal quantity.

¹³⁸ See section on daily bag limits.

¹³⁹ Most of the information in this section comes from SFITUM (2004).

¹⁴⁰ Personal communication with Vahdet Ünal, Ege University, Turkey.

¹⁴¹ See supra.

¹⁴² None of the recreational titles were valid. The professional navigation title of "Patrón de Cabotaje" (highest degree of the navigation title) was required.

¹⁴³ SFITUM legislation report, 2004.

¹⁴⁴ The Professional navigation qualification are : "Brevet de Patron de petite navigation » called « Certificat de capacité » or « Capacitaire ». The Brevet is limited to vessels of 100 tonnes (GRT) and does not allow the skipper to go further than 20 nautical miles from shore.

¹⁴⁵ Ibid.

fishing in Croatia was not regulated by law and routinely fish caught by recreational fisherman remained with the charter boat and usually ended up in the market.¹⁴⁶

Charter boat requirements

As was the case for skippers, the boat licence requirements varied by country. Rarely did a boat have only a charter boat status (i.e. often the boat would be both a recreational and commercial fishing boat); potentially creating conflicts as RF boats were often exempted from licence/matriculations fee or from other requirements pertaining to commercial boats. Spain, which classified charter boats as mixed recreational/commercial boats, obliged these vessels to be matriculated under a separate listing. In France, a specific charter boat status did not exist; however professional charter organisations and authorities were working together to establish such a status. Because recreational crafts were not allowed to be used for lucrative purposes, authorities complemented existing statutes with special authorizations.

In Croatia, it was required that all boats be registered in the Croatian boat registry (Segedin, 2006). The length of fishing charter boat was determined by law and could not exceed 16 metres.

Pesca-turismo

As mentioned previously, the aim of charter fishing is primarily to fish as apposed to the concept of *pesca-turismo* for which the purpose is not only fishing but also to swim, snorkel, eat on board freshly caught fish and just enjoy a day on a boat in middle of the sea.¹⁴⁷ As noted in the Italian regulation of *pesca-turismo*, this activity may be considered a means to sensitizing tourists to the marine ecosystems and traditional fishing methods/cultures of the region.

Another fundamental difference between charter fishing and *pesca-turismo* is the almost complete lack (excluding Italy, see Box 8) of regulation for the second. In fact, *pesca-turismo* can be performed by a commercial fisherman on his boat or by a tourism agency on a private or recreational boat. Given that tourism fishing is gaining interest as an alternative to commercial fishing, this unregulated activity may increase in the future.

¹⁴⁶ Ibid.

¹⁴⁷ Art. 1 of Italian Decree of 13/04/1999 n.193 on the regulation of the activity of *pesca-turismo*: “Per pescaturismo si intendono le attività intraprese dall’armatore singolo, impresa o cooperative di nave da pesca costiera locale o ravvicinata, che imbarca sulla propria unità persone diverse dall’equipaggio per lo svolgimento di attività turisticoricreative. Tra le iniziative di pescaturismo rientrano: a) lo svolgimento di attività pratica di pesca sportiva (...); b) lo svolgimento di attività turisticoricreative nell’ottica della divulgazione della cultura del mare e della pesca, quali, in particolare, brevi escursioni lungo le coste, osservazione delle attività di pesca professionale, ristorazione a bordo o a terra; c) lo svolgimento di attività finalizzate alla conoscenza e alla valorizzazione dell’ambiente costiero, delle lagune costiere...”

**Box 8. Italian Decree of April. 13 1999 n. 293 on the Regulation of the tourism fishing activity
(*Pesca turismo*)**

The Article N.1 defines the concept of *pesca turismo* as the activities undertaken by the ship-owner, which can be an enterprise, a cooperative or a single, of a fish boat on which go on board people different from the crew in order to perform tourist and recreational activities. This notion includes various activities except fishing as spread of culture on sea and fisheries, eating on board, excursion along the coast, etc.

In order to exercise this activity an authorization is required which can be renewed. (Art. 7). The inquiry must be presented to the chief of the maritime department of the place where the boat is registered. Some documents must be provided in order to be issued the authorization. The chief of the relevant maritime department issues the permit within 60 days after the presentation of the inquiry and will fix the maximal number of people allowed to come on board (max 12 persons). (Art. 5). If the provisions of the present decree are not respected by the owner of the ship the authorization will be revoked for one year (Art. 7).

The decree regulates the days during the activity can be performed (bank holidays, night), people allowed to come on board (minors less than 14 years are allowed if they are accompanied) and safety requirements (see Art. 2 and 6).

Regarding fishing gears, the tourist fishing activity must respect the rules stated in the presidential decree of 1968 on recreational fisheries (Art. 3).

The cooperative and enterprise of fishing can perform tourist fishing only by using boat weighted less than 10 tonnes of gross tonnage purchase to this aim according to article 19 of the decree of 26 July 1995 (Art. 4). Other boats may perform tourist activities under particular conditions.

3.4 Monitoring and control of recreational fisheries

The adoption of a monitoring, control and surveillance (MCS) system is necessary to ensure that fishery policy in general and the conservation and management arrangements for a specific fishery are implemented fully and expeditiously. MCS operations encompass various activities such as the collection of data on catch and fishing effort, inspections (e.g. port inspection, observer on board) or air surveillance.

The MCS should be tailored to the concerned fisheries, in our case recreational fisheries. For, example as recreational fisheries take place mainly within waters under state jurisdiction, national control measures would be required. But as recreational anglers catch also highly migratory species of fish like tunas species, subregional or regional cooperation in conservation and management and hence also MCS is required. Without the implementation of a MCS, a recreational fisheries management scheme would be incomplete.

The 1993 FAO Compliance Agreement and the section relating to MCS of fishing vessels of the 1995 UN Fish Stocks Agreement,¹⁴⁸ although focussing on the high seas, confer the duty on States to develop control mechanisms to curb the illegal, unregulated and unreported fishing in both commercial and recreational fisheries. The existence of illegal or unregulated RF catches requires the setting up of a comprehensive monitoring system as well as the adoption of various control measures. In fact, the 1982 UN Convention on the Law of the Sea recognized the responsibility of the states on the use of marine resources within the waters under their jurisdiction. This new role complements the need to adopt effective control measures for the benefit of all stakeholders involved in fisheries, including also recreational fisheries.

¹⁴⁸ The Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas and United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks.

3.4.1 Monitoring and control bodies

Each Mediterranean country had a control body, potentially under a variety of ministries, in charge of maritime activities; therefore, the administrations responsible for the monitoring of RF varied across the Basin. In some cases, several bodies were involved in the control of RF, such as port authorities and fisheries administrations. In Spain, for example, the main control body was the Coast Guard of the Guardia Civil in charge of activities in sea. In addition, the Spanish Marine Fishing General Secretariat and the relevant institution at the regional level (e.g. the Directorate General Fisheries), participated in the control of RF through catch declarations.¹⁴⁹ During sport fishing competitions, the Directorate General “Marina Mercante” (Ministerio de Fomento), which controls navigational activity, must be informed of the fishing contests. In France, the main control bodies for RF were the *Direction des affaires maritimes et des gens de mer* and the *Ministère de l'équipement*, as well as other agencies involved in at sea activities, such as the *Gendarmerie nationale*. Identification of relevant bodies for the remaining Mediterranean countries was not possible.

As catch declarations were rarely required from authorities, few monitoring bodies were identified in this study. In Spain, where catch declaration were required at the state level but not always at the regional level,¹⁵⁰ the providing body differed from one region to another, for example in Catalonia the competent body was Directorate General of Fisheries. The receiving body was always at the state level the Marine Fishing General Secretariat for the three different kinds of catch declaration and for a report communicated on Recreational Fishing Licences issued by all the regions. But *a contrario*, every three months the Central Government sent a report of the Big Pelagic Authorisations issued to each relevant body at the regional level.¹⁵¹ Regarding catch declarations,¹⁵² the providing bodies are effectively the Fishing Club or Society as regions do not assume this role. This example shows the potential role of federation in co-monitoring recreational fisheries.

3.4.2 Monitoring and control measures

This section reviews the monitoring and control measures adopted by the Mediterranean countries for RF management. According to Flewwelling (1994), monitoring can be defined as the “continuous requirement for the measurement of fishing effort characteristics and resource yields”. So, monitoring measures include data collection, analysis, and diffusion. In opposition, control can be understood as “the regulatory conditions under which the exploitation of the resource may be conducted” (Flewwelling, 1995). Control measures normally include inspections (at-sea inspections, dock-side inspections, log-book inspections), prosecutions, inflicting sanctions, etc.

As may be the case in all fisheries, illegal catches occur also within the recreational fisheries: it was believed common in the Southern Mediterranean that recreational catches were often under the legal minimal size because of lack of information (anglers did not know the minimal sizes), by custom or for profit making aims (sales or bartering).¹⁵³ But in general, recreational fishermen belong to associations and are informed about minimal sizes and authorized quantities, even in the cases of weak controls.

Inspections

Inspection is a diffused monitoring method, at sea and/or ports, used for the control of commercial fishing activities in Mediterranean. When present on board, the authorized officers make sure that the fishing operations, occurring within the waters under national jurisdiction, are in conformity with the fisheries legislation in effect.

¹⁴⁹ See Box 9.

¹⁵⁰ See section on reporting.

¹⁵¹ The same which communicate the catch declarations.

¹⁵² Catch declaration from each day's activity for individual boat/fisherman and contest catch declarations.

¹⁵³ Personal communication with Marcel Ordan, President of CIPS.

The role of the on-board inspector is to verify a vessel's documentation, fishing gears and catch retained on-board or discarded. The in-port inspection includes the same verifications. These two types of inspection are complementary and are useful to prevent illegal catches, phenomenon present within Mediterranean waters.

In practice, in countries such as France or Italy, the relevant authorities for each country (gendarmerie, guardia civil, carabinieri) can check at any time the safety equipment, the catch and the fishing gears and tackles presents on board. However, there was no systematic inspection of RF boats in these countries or elsewhere in the Mediterranean.¹⁵⁴

Sport fishing competitions lend themselves to the presence of observers as these are punctual, organized and well communicated events. In Spain, for example, during sport fishing contests, the port-side judges were charged with making sure that the fishing rules and competition rules were respected (fishing gears, minimal size respected, etc) and on-board observers have been used; however, on a voluntary basis.

In France, sport fishing competitions were under the responsibility of the Fédération française des pêcheurs en mer.¹⁵⁵ The Federation must respect the regulations in place and ensure that participants and judges respect such rules. All catches are weighed, measured, and counted by national federal referees and the data collected are transmitted to IFREMER (Institut Français de Recherche pour l'Exploitation de la Mer).¹⁵⁶ In addition, France obliged the tagging of tunas and tuna-like species caught during any RF activities¹⁵⁷ in order to recognize the origin (commercial or recreational fishing) of the tuna.

Unfortunately, no information was available¹⁵⁸ regarding inspection activities in the Mediterranean basin for underwater recreational fishing (both sport and amateur), tourism fishing activities (charter and *pesca-turismo*) and fishing from shore (both sport and amateur).

Sanctions

Sanctions are often used as deterrents to lawbreaking and may take the form of payment of fees/fines, disqualification from practising fishing activities (permanently or otherwise), seizure of products obtained illegally, confiscation of fishing gears, seizure of boat, cancellation or non renewal of licences, and the like.

In Turkey, for example, the recreational fishermen were responsible for their behaviour and to ensure accordance with fishing laws in effect. If judged to be in infraction of such laws, individuals were subject to penalties such as the seizing of illegal fishing gears, loss of catch or payment of fines between 75 and 250 euros. These penalties were enforceable by different authorities (MARA, police, gendarme or coastguard).

In Albania, the sport fishermen using a vessel without a licence or who did not respect other provisions of the Fishery and Aquaculture Law of 1995 incurred fines from 5 000 (€9.53) to 10 000 Lek (€9.04). Moreover, the holder of the sport fishing licence who did not present the information required by law (i.e. data on activities) would be fined from 10 000 (€9.04) to 50 000 Lek (€95.16).¹⁵⁹

¹⁵⁴ Personal communication with Marcel Ordan, President of CIPS.

¹⁵⁵ The season started from 17 July to 9 October. The number of days of fishing is authorized and monitoring by "Direction des affaires maritimes et des gens de mer.

¹⁵⁶ IFREMER has, *inter alia*, the mission to know, evaluate and enhance marine resources and to promote their sustainable exploitation.

¹⁵⁷ Art. 2 of the Order No. 506 of 26/08/1994.

¹⁵⁸ Except for the examples stated before as Tunas in France and boat fishing in Italy, France and Spain.

¹⁵⁹ Article 39 of Law No. 7908 on Fishery and Aquaculture of 05/04/1995.

As was the case in Turkey, competent authorities to inflict penalties could be multiple and varied from one country to another across the Mediterranean. Furthermore, the sanctions were either the same for both recreational and commercial fishermen who commit infractions (e.g. Spain) or were specific to recreational fishermen (e.g. France¹⁶⁰).

Adopting special sanctions for recreational fishermen could be expedient, as commercial and recreational fisheries are different regarding the manner in which they are performed.

Reporting

The collection of information, both biological and socio-economic, regarding RF activities is an integral part of RF management. Such information would allow for a deeper understanding of the impacts of RF on the main resources as well as its socio economic importance to the local and national economies. Equally important as the information itself are the means in which the data are collected and how they are used in RF management. Involving stakeholders in the collect and use of RF information will not only increase the transparency of management but will likely lead to more readily available information as stakeholders will see the utility of providing information for management. Data collection systems could include various methods such as using catch reports, competitions records, clubs/association/federations submissions, licence reports, market data, and surveys.

According to the European Commission, “particular attention should be given to set up a control and reporting frameworks for recreational fisheries either targeting shared and straddling stocks or competing with commercial fisheries which are submitted to strict technical rules” (COM (2002) 535 final). Marine recreational fisheries could be controlled by two means: direct inspection and provision of information (catch reports, licences report, surveys). Unfortunately, these practices were not consistently diffused throughout the Mediterranean basin and there were no general obligations for recreational fishermen in the Mediterranean to report their catch and effort information in the marine waters.

Moreover, when this study was compiled, ICCAT has recently adopted its recommendation 06-05 BFT stating that Member Countries shall take measures to record catch data from amateur fishing as well as from sport fishing and transmit them to the Scientific Committee on Research and Statistics.¹⁶¹

However, catch reports were required in only a few Mediterranean countries. Spain was one of these countries¹⁶² and obliged, either the autonomous regions or the fishing club or society, (depending on the type of information) to communicate the catch declarations to the Marine Fishing General Secretariat (state level). Box 9 details the information required by Spanish authorities. In addition, the autonomous regions were required to send a report of the recreational fishing licences issued every three months to the central government and the central government would then send a report of the big pelagic authorizations¹⁶³ to the regions every three months. Boats with special authorization for tunas or swordfish were required to declare catches directly to the central government (Fishing Secretariat). However, there was no system in place obliging the recreational fisheries to declare catch levels; therefore, rendering the reporting system less efficient. In Italy, individuals involved in sport fishing competitions were required to report catch data (Presidential decree No1639/1968). In Morocco, the owners of a licence needed to complete quarterly catch declarations, and non-residents and foreign tourists at the end of their stay. In Albania, the Law on Fishery and Aquaculture stated in the Article 25 that the holder of a professional or sport fishing licence was obliged to present and declare the statistical data on activities carried out. In the case of non-respect of this obligation, recreational anglers left themselves exposed to sanctions.

¹⁶⁰ Decree No. 90-618 of 11 July 1990, Order of 21 December 1999 and Decree of 9 January 1852.

¹⁶¹ This provision was also included in another recommendation (Rec.04-12) on measures concerning sport and amateur fishing activities in the Mediterranean Sea.

¹⁶² According to available information, Albania, Italy, Morocco and Spain were the only Mediterranean countries identified where catch reports were required for RF.

¹⁶³ Art. 12 of Order of 29/02/1999.

Cyprus conducted initial studies regarding RF catch statistics collection as a first step toward a pilot study for collecting catch data from the recreational fisheries (note that RF data were “not reflected in the Fishery Statistics of Cyprus as the DFMR attention has only recently focused on this fishery. Through the proposed National Programme measures will be taken to record data on catches resulting from recreational/sport fisheries.”¹⁶⁴) In most cases, RF catch reports were communicated on a voluntary basis, as it is the case in France, or not requested at all by national authorities.

Since December 2006, EC “Members States shall take measure both to record and to ensure separate collection of data on catches resulting from leisure fisheries in respect of the highly migratory species listed in Annex I to Regulation (EC) 973/2001¹⁶⁵ and occurring in the Mediterranean” (Council Regulation (EC) No. 1967/2006). Species concerned were albacore, bluefin tuna, bigeye tuna, skipjack, Atlantic bonitos, yellowfin tuna, blackfin tuna, little tuna, southern bluefin tuna, frigate tuna, Oceanic seabream, marlins, sailfish, swordfish, sauries, dolphin fish, sharks and cetaceans. When this study was compiled, the mentioned regulation has been only just adopted, so Members States had not yet adopted or amended their regulation in order to fulfil the obligation required to collect data on catches for these species. In consequence, Spain will have to reinforce the obligation for the autonomous regions to communicate to the state level the relevant information regarding catch reports. It could be envisaged that such disposals be widened to the whole Mediterranean area through the GFCM.

Box 9. Provision of information on Spanish RF

Spain requires from the coastal regions to transmit two different types of information:

- Catch declaration.
- Report on recreational fishing licences issued.

Different types of catch declarations are communicated to the Marine Fishing General Secretariat: catch declaration from each day’s activity for individual boat/fisherman, catch data in inner waters and contest catch declaration.

Regarding the catch declaration from each day’s activity for individual boat/fisherman, catch declaration is obligatory for species included in Annex III of the Order of 26 February, 1999. The catch declaration may be per boat or per licence, but the boat authorization number must be specified. The fisherman, boat owner or fishing club, society or federation which has been recognized, must send the declaration to the Marine Fishing General Secretariat no later than 7 days from the fishing date.

For contest catch declaration, the procedure is exactly the same regarding the communication of the data to the Marine Fishing General Secretariat at the national level. In Catalonia, the Sport Fishing Federation must be present Contest Catch Declaration before 30 days after the event. In the Balearic Islands, organising clubs and/or federations must send the results of the contests within 15 days to the Fisheries and Aquaculture Department.

However, no region obliged recreational fishermen to declare catches for each day’s activity (individual boat/fisherman). And for contest catch declaration, only Catalonia and Balearic Islands impose them (Fishing club or society) to declare catches.

Source: SFITUM (2004).

Education and sensitisation

Communication and outreach of rights, rules and regulations to fishers is an essential element for the success of any legislative framework as ignorance or lack of comprehension of such rules may prove a large factor in fishing infractions, especially in a rapidly changing sector in which new rules and

¹⁶⁴ Personal communication with Georgios Ioannous from the Department of Fisheries and Marine Research of the Ministry of Agriculture, Natural Resources and Environment of Cyprus

¹⁶⁵ Council Regulation (EC) No. 973/2001 of 14 May 2001 laying down certain technical measures for the conservation of certain stocks of highly migratory species. Regulation as last amended by regulation (EC) No. 831/2004.

regulations are put into place. In fact, the most beneficial aspect of enforcement is preventive enforcement.

Examples of sensitization methods include the circulation of informative booklets distributed by RF federations or associations or by public authorities as part of the licensing process. In the case of charter fishing and *pesca-turismo*, information concerning applicable laws and requirements could be disseminated through the charter or vessel owners directly to the prospective fishers/tourists. Teaching aids may take many forms (meetings, pamphlets, courses, etc), depending on the local culture; however obligations regarding regulations (e.g. minimal sizes, prohibited species, daily bag limits, allowed gears) must be transmitted.

In Turkey, a recreational fishing circular, produced every two years, (see Box 10) was distributed to RF fishermen covering relevant definitions and including restrictions and bans on species, fishing gears and areas. In France, the sensitisation regarding minimal sizes and prohibited species was facilitated by a booklet distributed by the FFPM (Fédération française des pêcheurs en mer) in association with the Provence-Alpes-Côte d'Azur region (see Box 11).

In addition, the participatory development of codes of conduct for responsible RF may prove useful in further sensitizing fishers. In 2004, Italy developed a voluntary code of conduct for both freshwater and saltwater RF as a collaborative effort with RF federations and associations, private actors, universities and public authorities, such as regional and provincial administrations. The booklet produced for the dissemination of this code included an introduction, presenting the purpose of the code, its two-year elaboration, and the state of RF in Italy. In addition to the code itself, the booklet included information on the biological status of RF and information on the legal framework (see Box 12).

Furthermore, at the European level, EIFAC recognized in the symposium that the production, acceptance and use of a code of conduct for responsible recreational fisheries is of key importance (Hickley, 1998).

One should note that the International Game Fish Association (IGFA) had adopted a kind of code of conduct called International Angling Rules “to promote ethical and sporting angling practices, to establish uniform regulations for the compilation of world game fish records, and to provide basic angling guidelines for use in fishing tournaments and any other group angling activities”.¹⁶⁶ Even if the set of rules mainly provided equipment regulations and defined world record requirements, this is a first step showing that anglers could reach an agreement on common fishing rules.

The development of a Mediterranean-wide voluntary code of conduct for marine RF has been voiced (FMPR, 2006) and would benefit from existing codes of conduct in the Mediterranean and elsewhere.

¹⁶⁶ Available at <http://www.igfa.org/BookRule2004.pdf>

Box 10. Recreational fisheries circular in Turkey

The circular comprised seven sections: 1) Objectives and definitions; 2) Performing amateur fishing; 3) Restrictions and bans for species; 4) Restrictions and bans for species; 5) Restrictions and bans for areas; 6) Legislations and enforcement; and 7) General provisions. In addition there is another section including FAQs, comments and information related to recreational fishing.



Box 11. Booklet on the sensitisation on minimal sizes in France

Mulet ou Muge (*Lepomis microlophus*) 20 cm*

Corb* (*Scorpaenopsis barbata*) 30 cm

Brochet de mer-aphyrène (*Sphyrna tiburo*)

Soupe (*Scorpaenopsis barbata*)

Congre (*Conger conger*)

Murène (*Muraena helena*)

Corbier (*Paripion stricklandii*)

Alose (*Alosa alosa*) 30 cm*

Emmele (*Muraena aoteana*)

* Taille des poissons à mesurer de la pointe du museau à l'extrémité de la nageoire caudale.

Par soucis de protection certaines espèces sont interdites à la pêche

Merou Brun (*Scorpaenopsis barbata*)
Espèce protégée

Grandes Vives (*Scorpaenopsis barbata*)
Espèce vulnérable

Rascasse brune (*Scorpaenopsis barbata*)
Espèce vulnérable

Rascasse pustuleuse (*Scorpaenopsis barbata*)
Espèce vulnérable

Roi pastenague (*Scorpaenopsis barbata*)
Espèce vulnérable

FFPM
Fédération Française des Pêcheurs en Mer

Agréé et délégué du Ministère de la Jeunesse et des Sports
Agréé par le Ministère de l'Environnement
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PÊCHEURS, RESPECTONS LES TAILLES EN MÉDITERRANÉE

En mer Méditerranée, comme en eau douce, il existe une réglementation définissant la taille minimale des poissons autorisés à la pêche de loisirs

Loligo (*Doroteuthis idacea*) 25 cm*

Dorade Royale (*Scorpaenopsis barbata*) 20 cm*

Sar commun (*Opliodon elongatus*) 15 cm*

Sar à tête noire (*Opliodon elongatus*) 15 cm*

Pégase commun (*Pagrus pagrus*) 12 cm*

Box 12. The drafting of a code of conduct for responsible sport fishing in Italy

The booklet presented below contained a draft of a code of conduct for responsible sport fisheries, which was not definitive. The draft code included nine articles linked to the general principles stated in the Code of conduct adopted by FAO in 1995. So the purpose of the Italian code was to provide a set of principles to support sportive anglers to practice fishing in a sustainable way. It was also addressed to the public authorities who want to use it in decision making concerning recreational fishing. As is the case for the FAO Code of conduct, the Italian Code is voluntary and therefore, without legal force.

- Article 1: Nature and purpose of the code.
- Article 2: General principles.
- Article 3: Conservation of species.
- Article 4: Preservation of autochthonous species and action of repopulation within freshwaters.
- Article 5: Commercial fishing and sport fishing.
- Article 6: Management of sport fishing.
- Article 7: Research.
- Article 8: The sport angler.
- Article 9: Agonistic Fishing: the competitions.



Source: Lega Pesca (2004).

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- Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (1993)
- FAO Code of Conduct for Responsible Fisheries (1995)

- Agreement for the Implementation of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks
- United Nations Convention on the Law of the Sea (1982)

EU relevant texts

- Com (2002) 535 final, Brussels 09.10.2002, Communication from the Commission to the Council and the European Parliament laying down a Community action plan for the conservation and sustainable exploitation of fisheries resources in Mediterranean Sea under the Common Fisheries Policy
- Council regulation on management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea, (EC) No. 1967/2006 of 21 December 2006

APPENDIX 1. LICENCE REGIMES FOR RECREATIONAL FISHERIES IN THE MEDITERRANEAN

Countries	Shore-based fishing	Boat-based fishing	Underwater fishing	Licence issuing institution	Licence eligibility restrictions
Albania	No licence is required (Article 23 of law No. 7908 of 1995).	Licence is required if a vessel is used to conduct such fishing operations (Article 23 of law No. 7908 of 1995).	Licence is not required (no precisions within laws).	Minister of agriculture and food (Art 23 of Law No. 7491 05/04/1995).	Sport fishing associations or interested persons who satisfy the criteria mentioned at the point 3 of the Article 56 of Fisheries Regulations No. 1 of 1997.
Algeria	Licence required (Art. 13 of the Executive Decree No. 03-481 of 13/12/03).			Administration responsible for fisheries (Art. 63 of the Executive Decree No. 03-481 of 13/12/03).	n.a.
Croatia	Any individual, whether a Croatian or a foreign citizen, wishing to engage in sport and recreational fishing activities is required to obtain a licence (Articles 31 of the Marine Fisheries Act of 1997).			Licence issued by a field office of the Ministry responsible for marine fisheries (Articles 32 of the Marine Fisheries Act of 1997).	n.a.
Cyprus	According to Regulations 3 and 4 of the National Fisheries Law, a licence/permit is needed to practice RF.		Licence is not required for underwater recreational fishing (Regulation 17 (1) and Regulation 17 (2) of the National Fisheries Law.	Department of Fisheries and Marine Research (DFMR).	n.a.
Egypt ¹⁶⁷	Shore based licence are issued.	The licence is issued to the owner of the boat and is valid both for him and the accompanists. ¹⁶⁸ Participants in the sport contest are not required to hold a RF licence.	Licence required only in the zone of Cape Mohammed and Sharm El-sheikh (Art. 1 of Resolution No. 64 of the Ministry of transport regulating diving sport in the zone of Cape Mohammed and Sharm El-sheikh of 2 February 2003).	General authority for Fisheries Resources Development of the Ministry of Agriculture.	n.a.

¹⁶⁷ When this study was compiled, the GAFRD in Egypt was planning to adopt new regulation on RF stating that all recreational fisheries, including shore fishing, boat fishing and underwater fishing, will require a licence issued by

Countries	Shore-based fishing	Boat-based fishing	Underwater fishing	Licence issuing institution	Licence eligibility restrictions
European Union	No regulation.				
France	There is no licence required for marine recreational fishing in France from shore and boats.		<p>–Underwater recreational fishermen must every year do a statement to the decentralized departments of the maritime affairs which issue a receipt (<i>récépissé</i>).</p> <p>– Individuals holding licences delivered by a sports federation authorized by the Sports Ministry are exempted from these annual declarations.</p>		Older than 16 years.
Greece	Licence is not required.	Amateur individual licence is required, valid within the Greek territorial waters (Presidential Order No. 373 on sport-recreational fishing of July 16 1985).	Licence is required.	Local port police or police departments (Presidential Order No. 373 on sport-recreational fishing of July 16 1985).	Older than 16 years.
Israel	n.a.				
Italy	No licence is required to engage in RF within Italian waters. But individuals involved in sporting competitions are required to be members of a national sport fishing federation and to report catch data (Presidential decree No1639/1968).				
Lebanon	Amateur marine fishing licence is required.	Amateur marine fishing licence is required.	<p>–Amateur underwater fishers require licences to fish with spearguns (Art. 4 of of Decree No. 1/126 May 23, 2001).</p> <p>–To use diving equipment, a certificate is needed. It is issued by a Club or institute/academy. (Art. 5 of Decree No. 347, December 11, 1972).</p> <p>– Annual fee for UFL: LL 5, 000 (Law No. 89. September 7, 1991).</p>	Ministry of Agriculture-Department of Fisheries & Wildlife issues underwater fisheries licence (Art. 4 of Decree No. 1/126 May 23, 2001 and Art 100 of Decree No. 5246 June 20, 1994).	Foreign tourists are permitted to practice underwater fishing on condition that they belong to an international underwater fishing club and obtain the required licence (Art. 2 of Decree No. 347, December 11, 1972).
Libyan A. J.	n.a.				

GAFRD. Personal communication with Ahmed Salem from the General Authority for Fishing Resources Development of Egypt (GAFRD).

¹⁶⁸ Personal communication with Ahmed Salem from the General Authority for Fishing Resources Development of Egypt (GAFRD).

Countries	Shore-based fishing	Boat-based fishing	Underwater fishing	Licence issuing institution	Licence eligibility restrictions
Malta	Vessels ¹⁶⁹ registered in the national fishing fleet register and are classified as non-commercial "Category C" vessels require a licence. Vessels engaged in recreational fishing that are registered only in the National Maritime Register do not need a licence.				
Morocco	Licence is required.	Licence is not required.	Underwater recreational fishing requires special authorization (Art. 4 of Law No. 1673-255 of 1973).	n.a.	Non-resident tourists were not required have to pay forhaving this special authorization (Art. 4 of Law No. 1673-255 of 1973).
Serbia - Montenegro	A permit is necessary for fishing from shore by means of fishing rod and line (Article 19 of the law on marine Fishery of September 25 2003).	n.a.	Permit required for the carrying of underwater guns (Art. 22 Law on Marine Fishery of 2003).	Permit issued by the authority of local self-management in charge of sport and recreation affairs (Article 20 of the law on Marine Fisheries of 2003)	The permit can be used only by its holder (Article 19 of the law on marine Fishery of September 25 2003).
Slovenia	No permit or ticket is required for engaging in sport and recreational fishing activities from the shore (Article 28 (7) of the Marine Fisheries Act of 2002).	Annual permit for sport fishing and daily or weekly recreational fishing ticket for recreational fisheries (Article 28 (2) of the Marine Fisheries Act of 2002).	An underwater sport fishing permit is required to engage in RF using an underwater gun (Article 29 of the Marine Fisheries At of 2002).	A daily or weekly recreational fishing ticket shall be issued on the basis of public authorization by a federation of sports marine fishing societies (Article 28 (4) of the Marine Fisheries Act of 2002).	To be issued a sports fishing permit, a person must be a member of a sport marine fishing organization belonging to the national federation of sport marine fishing organizations (Article 28 (3) of the Marine Fisheries Act of 2002). Idem for a person who apply for an underwater sport permit (Article 29 (3) of the Marine Fisheries At of 2002).

¹⁶⁹ It is the major sector, 826 vessels in 2002. The recreational fishing sector in Malta has two sectors.

Countries	Shore-based fishing	Boat-based fishing	Underwater fishing	Licence issuing institution	Licence eligibility restrictions
Spain	For the practice of RF it is necessary to possess the corresponding licence issued by the relevant authority of the autonomous regions (Article 3.1 of the Order of 26/02/1999)	For the catch or possession on-board of species under specific conservation measures, listed in the Annex III, boats must possess specific authorization issued by the General Secretariat Marine Fisheries (Article 3.2 of the Order 26/02/1999). The Federative RF licence (FRFL) is necessary to take part in any competition.	In Catalonia, Valencia, Murcia, Andalusia, Balearic Islands Underwater RF licences are required (Article 5 of Decree 109/95, Article 3 of Decree 131/00, Article 6 of Decree 92/84, Decree 361/2003, Decree 69/99 and Article 2 of Decree 61/02).	The federative licence is issued by the Regional Delegations of “Federación Espanola de Pesca y Casting” (FEP y C).	n.a
Syrian A.R.	Individual permits/licences required (Art. 35 of the Legislative Decree No. 30 on the protection of aquatic life of 12/08/64).			n.a.	n.a.
Tunisia	n.a.	n.a.	Need authorization (Art. 15 of Law of 30/9/1994).	n.a.	n.a.
Turkey	Open public access. But a document is given to anglers who want to certify their activities. Non-Turkish residents can perform recreational fishing by having “certificate of visiting amateur fisher” issued by MARA, valid for 2 years.				

Notes: n.a. = not available; here the classification used is in function of the three main segments of recreational fisheries used in this report; however, some countries adopted a different classification in function of the purposes of the RF activity performed (sport and amateur fishing licences).

APPENDIX 2. MAIN MANAGEMENT MEASURES OF RECREATIONAL FISHERIES IN THE MEDITERRANEAN

Country	Prohibition of sales	Limitation of fishing modalities and tackles	Catch limits	Minimum lengths or weights ¹⁷⁰	Forbidden species	Spatial and temporal limits	Other general prohibitions
Albania	No precision	Sport fishing is only allowed to be exercised with hooks, fish rod and sea guns. Only the use of the mask and the tube for fishing with the gun are allowed. In the sailing means is not allowed any kind of fishing equipment or net used in professional fishing (Art. 57 of Fisheries Regulations No. 1 of 1997). Use of spearguns is subject to an age limit (16) and cannot be used in conjunction with a self contained underwater breathing apparatus (Art. 23 of Law No. 7908 of 1995 as modified by Article 6 of Law No. 8870 of 2002).	It is not allowed to fish during the day a quantity of more than 3 kg fish for every fisherman, except the cases when the weight of a single sample exceeds this limit (Art. 58 of Fisheries Regulations No. 1 of 1997).	Art 51, of Regulation No. 1 (29/3/05) on the implementation of the legislation on fishery and aquaculture.	– It is not allowed to fish cockles, crustacean and other kinds, which are prohibited from the sub legal acts issued by the ministry (Art. 58.1d of Fisheries Regulations No. 1 of 1997). – Sturgeons, Njila, sharks, Lopa e detit (Mobular mobular), Gureshpuesi (bivalve mussels) (Art. 48 par.1 of Regulation No. 1 on the implementation of the legislation on fishery and aquaculture). – Sea mammals (dolphins, whales, seals, etc.). (Art. 48 par.2 of Regulation No. 1 on the implementation of	– Use of spearguns is subject to area restrictions, it cannot be used within 50 m from professional gears and in marine protected areas (Art. 23 of Law No. 7908 of 1995 as modified by Article 6 of Law No. 8870 of 2002).	It is not allowed: – To use more than five hooks (fishing poles) for a fisherman in the sea waters and three hooks (fishing poles) in other waters different from marine waters. – To use a form of fishing with light resources, except of a hand light or lamp for underwater fishing (Art. 58.1d of Fisheries Regulations No. 1 of 1997). All the prohibitions foreseen for professional fishing also apply to sport fishing (Art. 58.2d of Fisheries Regulations No. 1 of 1997).

¹⁷⁰ See Appendix 3 for size limitations.

Country	Prohibition of sales	Limitation of fishing modalities and tackles	Catch limits	Minimum lengths or weights ¹⁷⁰	Forbidden species	Spatial and temporal limits	Other general prohibitions
					the legislation on fishery and aquaculture).		
Algeria	The product of RF is destined for self consumption and cannot be sold, traded or exchanged. (Art. 62 of Executive Decree No. 03-481 of 13/12/03).			– Art. 1 of Decree of 9/03/1995.			
Croatia	– Fish and other marine organisms caught while conducting sport and recreational fishing activities may not be put on the market (Art. 33 of the Marine Fisheries Act of 1997).	– The manner, type and the quantity of fishing gear and equipment which can be used in the sport and recreational fishing activities are determined by the minister (Article 35 of the Marine Fisheries Act of 1997). It is allowed to use: – hand lines (2 per licence). – Trolling lines (2 per licence). – Hand lines with hooks for cephalopods (2 per licence) – Traps for sea worm (2).	– It is allowed to catch and collect a maximum of 5 kilos of fish and other marine organisms per day. The cartilaginous fishes, as well as single fish heavier than 5 kilos are excluded from the amount given in paragraph 2 of this article (Art. 33 of the Marine Fisheries Act of 1997). During the competition in sport and recreational fishing	– Ordinance on the protection of fish and other marine organisms of 20/08/02.			

Country	Prohibition of sales	Limitation of fishing modalities and tackles	Catch limits	Minimum lengths or weights ¹⁷⁰	Forbidden species	Spatial and temporal limits	Other general prohibitions
		<p>– Spearguns for underwater fishing (2) No gear other than hand lines and trolling lines (no more than two pieces each) can be used for the catching of big games (e.g. Bluefin tuna and swordfish).</p> <p>– Use of self-contained underwater breathing apparatus is prohibited for both sport and recreational fisheries. (Regulation on sport and recreational fishing established in 2001).</p>	the quantity of catch is not limited (Art. 34 of the Marine Fisheries Act of 1997).				
Cyprus	National Fisheries Legislation, Regulation 17C refers to all recreational anglers and prohibits the sale of any kind of organism caught.	Recreational fisherman from boat can only use nets of maximum total length 800 m (use of monofilament net is prohibited) and total length of longlines that are allowed is 500 m (total of 200 hooks) (Regulations 17A and 17B of the National Fisheries Legislation).	With the use of nets and longlines the maximum landing catch is 10 kg for each method. For fishing with traps it is also 10 kg and for underwater fishing the maximum landing catch is three fish (Regulations 17C and 19 of the National Fisheries Legislation).				

Country	Prohibition of sales	Limitation of fishing modalities and tackles	Catch limits	Minimum lengths or weights ¹⁷⁰	Forbidden species	Spatial and temporal limits	Other general prohibitions
Egypt		– Shore-based recreational fishermen can not carry more than one fishing rod with maximum of two hooks (Act No. 124 of August 18, 1983 on fishing, aquatic life and aquaculture).		Art 9. Regulation No. 667 of 1961 on fishery states the size limit for four species: – “cabot” part of perch order: 16 cm. – grey mullet: 14 cm. – muge caption: 10 cm. – tilapia: 10 cm.			
European Union	Article 17 of Council regulation (EC) No. 1967/2006 of 21 December 2006 establish an absolute prohibition of sale of the catches of RF. But, by way of exception, sale of species caught in sportive competitions may be authorized provided that the profits from their sale are used for charitable.	The use of towed nets, surrounding nets, purse seines, boat dredges, mechanised dredges, gillnets, trammel nets and combined bottom-set nets shall be prohibited for leisure fisheries. The use of longlines for highly migratory species shall also be prohibited for leisure fisheries (Article 17 Council regulation (EC) No. 1967/2006).		Annex III of Council regulation (EC) No. 1967/2006, See Annex II of this study.	It is forbidden to fish St Andrew’s cross and similar grabs for harvesting, in particular, red coral or other type pf corals or coral-like organisms. Fishing berried females crawfish and berried female lobster shall be prohibited. (Article 8 (1) of Council regulation (EC) No. 1967/2006). The deliberate catching, retention on board, transhipment or landing of marine species referred to in Annex IV to	On Fishing protected areas see Chapter III of Council regulation (EC) No. 1967/2006.	

Country	Prohibition of sales	Limitation of fishing modalities and tackles	Catch limits	Minimum lengths or weights ¹⁷⁰	Forbidden species	Spatial and temporal limits	Other general prohibitions
					Directive 92/43/EEC shall be prohibited except when a derogation has been granted according to Article 16 of Directive 92/43/EEC.		
France	Catch cannot be hawked, offered for sale, sold, or bought with knowledge of the fact. Catch shall be consumed exclusively by the fisher and his family (Article 1 of Decree No. 90-618 of 11/07/1990). There are some exceptions for the tuna fish but only for fishing contests with a state agreement.	Only these gears can be used for boats practising recreational fishing: lines with a maximum number of 12 hooks, 2 long lines with 30 hooks each, 2 traps, a spear, 1 landing net, 1 “grapette”.	There is no limit in terms of weight or number of specimen for MRF in France. But Blue Fin Tuna is subject to specific measures regarding its conservation in the Mediterranean. For example, the quantity of tuna species caught by a non professional fishing vessel (either trolling or drifting) is limited to 25 kg or one tuna fish per person onboard and per day. But quantity can be surpassed with special authorization. (Art. 1 of the Order No. 506 of 26/8/1994).	Size and weight permitted for MRF are established in Decree No. 99-1163 of 21 December 1999 and in Order of 21 December 1999.	Dusky Grouper in continental Mediterranean from 1st January 2003 to 31 December 2007 (Order No. 2002/1113 of 30 December 2002). Plus all the international treaties signed in France which protected different species.	There are three main kind of marine protected areas: Natural Park (region management), National Park (state management) and local reserve (Department management). For example, in the Natural Reserve of Scandola in Corsica, RF is not allowed.	– Are forbidden by default in D.90-618 the following tackles: use of electrical or hydraulic bobbins, or any gear which is strictly manual, use of any means artificial attraction or concentration of species and, explicitly the use of lights for this purpose, use of any kind of poisonous, narcotic, exploding or polluting substances – The Tunas during RF after being fished have to wear tag (Art. 2 of the Order No. 506 of 26/8/1994). – It is prohibited to

Country	Prohibition of sales	Limitation of fishing modalities and tackles	Catch limits	Minimum lengths or weights ¹⁷⁰	Forbidden species	Spatial and temporal limits	Other general prohibitions
							fish Tuna within 1 mile from other vessels in action (Art. 3 of the Order No. 506 of 26/8/1994).
Greece	Sale fish is illegal (Presidential Order No. 373 of 16 July 1985).	<ul style="list-style-type: none"> – It is forbidden to use of nets (manomena) or larger than 100 metres for each vessel, with a side smaller than 24 millimetres. – Each fisherman in the boat cannot use more than 150 hooks, the number of hooks per boat cannot exceed 300 however the number of fishermen. – It is forbidden to use more than two traps per fisherman. – Only one net thrown from land can be used which the diameter should be less than 10 metres and the opening “eye” should not be larger than 30 millimetres. (Presidential Order No. 373 on sport-recreational fishing of July 16 1985). 	– It is forbidden to fish with nets and long lines more than 10 kg of fish per day and per person or 5 kg per day and per person with other gears. (Presidential Order No. 373 on sport-recreational fishing of July 16 1985).	– It is prohibited for underwater recreational fisherman to fish fishes which weight less than 150 grams. (Presidential Order No. 373 on sport-recreational fishing of July 16 1985).	<ul style="list-style-type: none"> – It is prohibited to fish corals and sponges (Presidential Order No. 373 on sport-recreational fishing of July 16 1985). – It is also prohibited to fish shells (Presidential Order 86/98 & 227/03). 		<p>It is prohibited:</p> <ul style="list-style-type: none"> – To fish with any source of light, except for spearfishing. – Fishing with navigable means in the lagoons and farms of State and local authorities. – To fish with a net thrown from land at a distance smaller than 500 metres from the exit of rivers and 200 metres from the entrance openings of fish farms. (Presidential Order No. 373 of 16 July 1985).

Country	Prohibition of sales	Limitation of fishing modalities and tackles	Catch limits	Minimum lengths or weights ¹⁷⁰	Forbidden species	Spatial and temporal limits	Other general prohibitions
Israel				No specific rule for RF. But the Schedule 1 (Rule 6) of the Fisheries Rules 1/05/00, 1937 (original), lists about 35 species with the minimal size in cm. It includes the bluefin tuna (70 cm), hake (16 cm), sole (16 cm), mullet (11 cm).			
Italy	Prohibition of sale (DPR 1639/68).	From boat: – Cast net (max circumference less than 16 metres). – Fishing rod (a max of 5 rods by fisherman and not more than 3 hooks per rod). – Hand line (no more than 3 hooks per line). – Line for squid. – Trolling line. – Floating device with a hanging hooks for surface fishing. – Fishing rod for squids. – Fix or drifting log-lines (max 200 hooks by vessel). – Fish trap (max 2 by	Maximum of 5 kg of fishes, molluscs and cetaceans per fisherman and day is authorized (maximum weight can be overcome in the case of a single piece with a higher weight than 5 kg) (Art. 142 of Art. 128 bis of DPR 1639/38). Specified limit for a grouper to a max of one per day. The harvest of mussels for recreational purposes is subject to a 3 kg daily bag	No specific rule for RF. Article 87 of the DPR 1639/38 establishes the minimum size for each single species, according to the EU minimum size. For example sturgeon's size has to be minimum 60 cm. No tuna sport fishing regulation.	No forbidden species was found in Italian legislation. But the under water fisherman cannot take corals, shellfishes, molluscs (Art. 128 bis of DPR 1639/38).		– To practice RF with a not “unità da di porto” ship ¹⁷¹ (Art. 7 of DPR 1639/68). – The use of light sources, but for the use of a lamp is allowed during the fish spear fishery. – Obstructing or interfering with the activities of professional fishing. To practice RF at distance lower than 500m from professional fishing ships and gears (Art. 139 DPR 1639/68).

¹⁷¹ “Unità da di porto” is the vessel with exclusively recreational or sportive use, without lucrative purpose.

Country	Prohibition of sales	Limitation of fishing modalities and tackles	Catch limits	Minimum lengths or weights ¹⁷⁰	Forbidden species	Spatial and temporal limits	Other general prohibitions
		vessel). For underwater sport and recreational fisheries, breathing apparatus is prohibited but speargun is allowed (Art. 128 bis and 138 of DPR 1639/38).	limit (Ministerial Decree 10 th April 1997).				– To practice RF in important reproduction or growth areas (Art. 98 of DPR 1639/38, Art. 15 of L.963/65, Art. 27 of L.979/1982).
Lebanon	No precision	Recreational fishermen from shore can only fish with a fishing rod with maximum of two hooks (Art. 34 of Decree No. 2775, September 28, 1929).		Lebanon Resolution No. 15/1 of 14 January 2004. See Annex II.	– Underwater fishermen cannot collect sponge and fish lobster (Art. 5 of Decree No. 1/126 May 23, 2001).		
Libyan A. J.							
Malta ¹⁷²	No precision	There were no particular limitation for recreational fishing modalities and tackles.	Unknown	Art 37 and 38 of Fishery regulations of 25/05/1934.	Unknown	None	Use of lights is forbidden for fishing purposes within bays and harbours as well as poisons.
Morocco	– It is forbidden to sale the product of underwater fishing.		– Underwater recreational fishermen can not fish more than five pieces.	n.a.	– Fishing groupers is forbidden between the 1 st July and the 31 August included.		

¹⁷² There are no special regulations for recreational fisheries.

Country	Prohibition of sales	Limitation of fishing modalities and tackles	Catch limits	Minimum lengths or weights ¹⁷⁰	Forbidden species	Spatial and temporal limits	Other general prohibitions
Serbia - Montenegro	A natural person engaged in sport-recreational fishing must not sell or exchange its catch (Art. 21 of the Law on Marine Fishery of 2003).	Fishing lines, one rod for angle throwing, underwater gun without explosive charge, harpoons, longlines of up to 150 angles and tridents with a torch of up to 400 candelas or without it, one fish trap, with use of rowing boats, sailing boats or motor boat. For joint sport fishing bigger fishing, sport or other vessels can be used (Art. 1 of the Rule book on method, type and quantity of fishing tools and gear that can be used in sport-recreational fishing, forms, number and contents for the sport fishing permits of 10/02/2004). Collecting of fish, sponges and corals can be done only with manual tools such as: rakes, pincers and drivers' knife (Art. 1 of the Rulebook). When fishing with fishing lines, angles of curve width not less	RF has a daily limit of 5 kg of fish and other marine organisms, except during sport fishing competitions. This quantity can be reduced on request from the competent scientific institution (Art. 21 of the Law on Marine Fishery of 2003). Catching of marine game (shark, catfish, ray, etc.) And an individual fish that weights more than 5 kg (seabass, dentex, seabream etc.) Is not included on the quantity of fish stated at the Paragraph 2 of the article 21 of Law on Marine Fishery of 2003). Quantity of fish caught in sport-recreational fishing at the level of the state is not limited (Art. 25 Law on Marine Fishery of 2003).	Decree on prohibition of catch and trade in fish juveniles, undersized fish and other marine organisms of 10/02/04.	Marine mammals (whales, dolphins, seals, etc.) And sea turtles (Art 6 of Decree on prohibition of catch and trade in fish juveniles, undersized fish and other marine organisms of 10/02/04.		Sport-recreational fishing must not hinder commercial fishing (Art. 22 of the Law on Marine Fishery of 2003).

Country	Prohibition of sales	Limitation of fishing modalities and tackles	Catch limits	Minimum lengths or weights ¹⁷⁰	Forbidden species	Spatial and temporal limits	Other general prohibitions
		than 7mm can be used, whereas if fishing with floating fishing lines, the curve width must not be less than 9mm (Art. 2 of the Rulebook).					
Slovenia	Prohibition of offering on the market (Art. 30).	The Minister responsible for marine fisheries is empowered to prescribe the fishing gear and methods that may be used for sport and recreational fishing as well as the daily bag limits applicable to such activities (Art. 28 (6) of the Marine Fisheries Act of 2002). – The method of underwater sports fishing and the permitted daily quantity of catch shall be prescribed by the minister (Art. 29 (8) of the Marine Fisheries Act of 2002).					

Country	Prohibition of sales	Limitation of fishing modalities and tackles	Catch limits	Minimum lengths or weights ¹⁷⁰	Forbidden species	Spatial and temporal limits	Other general prohibitions
Spain	Sale of catches from RF is forbidden at all levels, state (Art. 11 of Order of February 26 1999, which establishes the norms that regulate marine RF modified by Order of July 24 2000) and regional (For Andalusia, Art. 2 of Decree 361/2003 of December 2003). But, sale is allowed when the catch comes from contests but the benefit must be given for social or charitable purposes (Art. 9 of Decree 69/1999 of June 4 modified in 2002 by Decree 61/2002).	At state level and regional level, the following modalities in RF from boat are authorized: bottom line fishing, spinning, shumming, jigging, hand line fishing, trolling. For the practice of RF, either from shore or boat, only lines and tackles with a maximum of six hocks or two jigging tackles are authorized. This includes both artificial lures and baited hooks, No more than two tackles per licence can be used. In big game each rod has a single hook and 6 rods are allowed. (Article 6 of O.26/02/99, O.24/07/00).	RF in Spain has a daily limit of catches per licence. At state level, for RFL the daily limit is 5 kg/RFL, for RFL for boat the daily limit is 25 kg/boat (Art. 4 of O.26/02/99 O.24/07/00). Limits can be different in the regions and in some regions catch limits are specified for fish. For example, in Catalonia, only 5 kg of cephalopod can be caught (Art. 25 of D.109/95). For species listed at the Annex III of the O.26/02/99 the quantities differ (See Art. 4. par. 3.a & b) of O.26/02/99. During competition, a special authorization is needed in order to surpass the quantities	Size and weights permitted in RF in Spain are established by the Royal Decree 560/1995 of April 7 about minimum sizes for specific species, based on the provisions of the article 5.2 of the Regulation (EEC) 3094/86 of October 7 and according to the Regulation (EC) 1626/94 of the Council, of June 27.	Prohibited species for RF in Spain are: corals, bivalves, gastropods, crustaceans and any other species determine by EU legislation or International Treaties signed by Spain (Annex II of the Order of February 26 1999).	Marine reserves and seasonal closures are management instruments which, above other measures, regulate RF (Art. 13 and 14 of Law 3/2001).	At the state level, are prohibited: Interference professional fishing, gears and tackles from professional fishing, non manual means, artificial concentration of fish, illegal substances, distances to restricted areas, (Article 11 of O.26/02/99, O.24/07/00). In Catalonia, Mooring at sea and fishing after sunset is prohibited (Art. 10-13 of Decree 109/95). In Andalusia, fishing after sunset is also prohibited (Art. 10, 14, 15 D.361/2003).

Country	Prohibition of sales	Limitation of fishing modalities and tackles	Catch limits	Minimum lengths or weights ¹⁷⁰	Forbidden species	Spatial and temporal limits	Other general prohibitions
			mentioned above (Art. 5 of O.26/02/99).				
Syrian A.R.	Amateur fishermen may not sell their catches (Art. 34 (b) of the Legislative Decree No. 30 on the protection of aquatic life of 12/08/64).						
Tunisia	– It is strictly forbidden to sale the product of the URF (Art. 24 of Law of 1994).	– Gears allowed are equipment used for the launch of a projectile destined to transfix the fish. Chemical mixing or compressed gas can not be used for the propulsion of the projectile, unless the compression of the gas is obtained by a manual action. (Art. 19 of the Law of 1994).	– The daily bag limit is stated only for URF and is limited to 5 kg except for single pieces which exceed this weight (par.2 of Art. 25 of Law of 1994). – During contests, the relevant authority can give special authorization allowing surpassing the quantity mentioned before (par.2 of Art. 25 of Law of 1994).	– Art 9 of Decree of 28/09/95 on regulation of fisheries.	– Fishing Grouper is prohibited during exercise of URF, except authorization from the relevant authority.		

Country	Prohibition of sales	Limitation of fishing modalities and tackles	Catch limits	Minimum lengths or weights ¹⁷⁰	Forbidden species	Spatial and temporal limits	Other general prohibitions
Turkey	Sale, barter or trade of all or part of the catch is not allowed (fishing circulars valid from 1/9/06 to 31/8/08).	<ul style="list-style-type: none"> – Every type of fishing lines including long-line, cast nets weighing up to 5 kg and scoop-nets, are allowed. – The use of fishing gear other than those mentioned above is determined by the Provincial Directorate in accordance with the principles dictated by the Ministry (Article 6 of the Fisheries Law, No. 1380). Gill net and speargun are although allowed (fishing circulars valid from 1/9/06 to 31/8/08). – Castnet: maximum length 3 metre, maximum mesh size 28mm. – Gill net: maximum length 5m, maximum height 1.5m, maximum mesh size 28mm. – Maximum of 4 lines per each angler are permitted and each line can have maximum 6 hooks. 	Daily quantity of fish to be caught in sport fishing can not exceed the quantity given in Annex 4 of the Fisheries Regulation corresponding to the Fisheries Law No. 1380 (Article 6 of Fisheries law No. 1380).	Defined by recreational fishery circular: mullet (13 cm, 5 kg), horse mackerel (13 cm, 5 kg), turbot (40 cm, 2 pieces), swordfish (130 cm, 1 piece), seabass (18 cm, 5 kg), blue fish (14 cm, 5 kg), blue fin tuna (90 cm, 1 piece), albacore (60, 1 piece), Atlantic mackerel (20 cm, 5 kg), Grouper (40 cm, 3 pieces). 5 kg of small sized fish are allowed. (fishing circulars valid from 1/9/06 to 31/8/08).	Defined by recreational fishery circular: Coral, dolphins, sturgeon, fatty fish, ocean sunfish, sea trout, brown meagre, basking shark, spider crab, sea turtle, grass carp, silver carp, sea horse, curled octopus, salmon... (Fishing circulars valid from 1/9/06 to 31/8/08).	Defined by recreational fishery circular: it defined some area restricted. It is prohibited to fish that have been specified and announced as by the city directorate as of the ministry as hauling areas.	<p>It is prohibited to use and have presents nets, any narcotic, deadening and lethal chemicals, all types of explosives, carbide, quick lime, dazing plants, to use electric current, electroshock, liquid gas and air pressure methods for amateur fishing activities.</p> <ul style="list-style-type: none"> – RF boat cannot be more than 7.5m. – RF is ban around the aquaculture cages. – No harpoons and underwater riffles are allowed at night time. <p>(fishing circulars valid from 1/9/06 to 31/8/08).</p>

APPENDIX 3. MINIMUM SIZES OF THE SPECIES POTENTIALLY CONCERNED BY RECREATIONAL FISHERIES

(centimetres)

Scientific name	Common name	Albania	Algeria	Croatia	Cyprus	Egypt	EU	France	Greece	Israel	Italy	Lebanon	Malta	Morocco	Serbia-Montenegro	Slovenia	Spain	Syrian A.R.	Tunisia	Turkey
<i>Acipenser</i> spp.	Sturgeon										60									
<i>Auxis rochei</i>	Bullet tuna											35								40
<i>Auxis thazard</i>	Frigate tuna		22																	
<i>Boops Boops</i>	Bogue	10						10	11		13				15		11			
<i>conger conger</i>	Conger	30													40		58			
<i>Dentex dentex</i>	Dentex	25		30								40			30				22	20
<i>Dicentrarchus labrax</i>	Seabass	25		23			25	25	25		20	26			25		23		25	18
<i>Diplodus</i> spp.	Seabream	15		15				15		11									20	
<i>Diplodus vulgaris</i>	Two-banded seabream						18		18						15					15
<i>Epinephelus aenus</i>	White grouper								45	30.		50								30
<i>Epinephelus</i> spp.	Grouper	45		45			45	15			45				60				35	40
<i>Euthynnus alletteratus</i>	Little-tunny										30	45								
<i>Katsuwonnus pelamis</i>	Skipjack		35									40								
<i>Labrus viridis</i>	Common dolphinfish																			40
<i>Lichia amia</i>	Leer fish	30							14										40	30
<i>Merluccius merluccius</i>	European hake	20		16			20	20	20	16	11	30		20	20		20		20	
<i>Mugil</i> spp.	Mullet	20		20		10		20	16		20	34			40		16		20	20

Scientific name	Common name																			
		Albania	Algeria	Croatia	Cyprus	Egypt	EU	France	Greece	Israel	Italy	Lebanon	Malta	Morocco	Serbia-Montenegro	Slovenia	Spain	Syrian A.R.	Tunisia	Turkey
<i>Mullus spp.</i>	Red mullet	11		11		14	11	11	11	11	15	12	10	11	11		15		12	13
<i>Pagellus erythrunus</i>	Pandora			12			15	12	15	11		16		14	15		12		12	15
<i>Pagellus spp.</i>	Common seabream										12				15		12		12	
<i>Pagrus pagrus</i>	Couch seabream			30			18.	20	18	15	18	24			36		18		20	
<i>Pleuronectes limanda</i>	Flounder	15									15									20
<i>Pomatomus saltatrix</i>	Blue fish																			14
<i>Raja spp.</i>	Ray	30						36.							37				40	
<i>Sarda sarda</i>	Atlantic bonito	30	35	45							25	40								25
<i>Sciaena umbra</i>	Brown meagre	25		30				30												
<i>Scomber japonicus</i>	Chub mackerel						18	18	18			30			25		18			18
<i>Scomber scombrus</i>	Atlantic mackerel	20		18			18	18	18		15	30			20		18		20	20
<i>Scomberesox saurus</i>	Sea pike																			60
<i>Scophthalmus sp.</i>	Turbot																			40
<i>Serranus scriba</i>	Little-thunny bonito		40																	45
<i>Solea vulgaris</i>	Sole	20		20			20		20	16	15			14	25		20		20	

Scientific name	Common name																				
		Albania	Algeria	Croatia	Cyprus	Egypt	EU	France	Greece	Israel	Italy	Lebanon	Malta	Morocco	Serbia-Montenegro	Slovenia	Spain	Syrian A.R.	Tunisia	Turkey	
<u><i>Sparus aurata</i></u>	Gilthead seabream	20		20			20	20	20	15	20	33			20		20		20	15	
<u><i>Sphyraena sphyraena</i></u>	European barracuda											50									
<u><i>Squalus spp.</i></u>	Sharks	40																			
<u><i>Thunnus alalunga</i></u>	Albacore	40									40						3.2 kg			60	
<u><i>Thunnus obesus</i></u>	Bigeye tuna																3.2 kg				
<u><i>Thunnus¹⁷³ thynnus</i></u>	Bluefin tuna	70	70	70 or 6.4 kg			70 cm or 6.4 kg	70 cm or 6.4 kg	80 cm or 10 kg	70 cm.	70 cm or 6.4 kg	95 cm		6.4 kg	70 cm or 6.4 kg		70 cm or 6.4 kg		6.4 kg	90	
<u><i>Trachurus trachurus</i></u>	Atlantic horse mackerel	12						15	12	15		12	20			20	15	12		12	
<u><i>Trachurus mediterraneus</i></u>	Mediterranean horse mackerel									15			20			20					
<u><i>Xiphias gladius</i></u>	Swordfish	100	120	120			120–110 cm (Med.)		120	120		140			125 cm or 25 kg				120	100	130

Note: Species underlined are the main recreational target species.

¹⁷³ According to the Resolution 06-05 BFT, recently adopted by ICCAT, the new minimal size was 30 kg for this species.

APPENDIX 4. EXAMPLE OF MARINE RESERVES WITH IMPACTS ON RECREATIONAL FISHING IN THE MEDITERRANEAN

Countries	Reserve	Surface areas	Legal status (foundation text)	Relevant Administration	Management Body	Regulations in the different areas		
						Core area	Buffer zone	Peripheral area
Albania	None							
Algeria	Ileshabibas	2 700 ha (40 ha terrestrial).	Marine Nature Reserve (JORA No. 23/2003).	Ministry of the Environment and Land Management	Shoreline National Commission	In progress	In progress	In progress
Cyprus	Lara Toxeftra	550 ha (+100 ha terrestrial)	Nature Reserve (Fisheries Law CAP 135 and Amendments 1961 to 2004).	Department of Fisheries and Marine research, Ministry of Agriculture, Natural Resources and Environment.	Department of Fisheries and Marine Research.	RF is forbidden as anchoring and sailing.	None	None
Croatia	Brijuni	2 651 ha	National Park (Brijuni National Park Act (1983).	Ministry of Culture	“Brijuni National Park” Institution.	– Spearfishing is forbidden as CF. – RF from boat and shore is regulated as anchoring and sailing.	Ibid.	None
	Kornati	16 750 ha	National Park (Kornati Is. National Park Act 1980).	Ministry of Culture	Public Institution Kornati Is. National Park	– RF is forbidden as spearfishing, anchoring, sailing and CF.	– Spearfishing is forbidden as CF. – RF from shore and from boat as anchoring is regulated. – Sailing is authorized.	None

Countries	Reserve	Surface areas	Legal status (foundation text)	Relevant Administration	Management Body	Regulations in the different areas		
						Core area	Buffer zone	Peripheral area
	Malostonski Zaljev	4 821 ha	Special Marine Reserve (Malostonski Zaljev Special Marine Reserve Act 1983).	Ministry of Culture	Dubrovnik-Neretva county (no specific body).	– Spearfishing is forbidden as CF. – RF from shore and from boat is regulated as anchoring and sailing.	Idem	None
Egypt	None							
France	Bouches de Bonifacio	80 000 ha	Nature Reserve (Decree 23/09/1999).	Ministry of Ecology and Sustainable Development	Corsican Environment Office.	– RF, spearfishing, CF and scuba diving are not allowed. ¹⁷⁴	– RF, scuba diving, spearfishing and CF is prohibited. ¹⁷⁵	– Spearfishing is not allowed. – RF and CF are regulated. ¹⁷⁶
	Côte Bleue	9 873 (intervention area (surveillance and artificial reefs). 295 ha for integral reserve.	Marine Park (Specifics orders (1983/1993/2000) and Extension orders (15/12/2003; 16/12/2004)).	Maritime Affairs Administration	Management Consortium (5 municipalities and as associated members, fishermen delegates).	– RF, spearfishing, CF, anchoring and scuba diving are forbidden. ¹⁷⁷	None	None

¹⁷⁴ Here the first degree is called integral reserve.

¹⁷⁵ Here the second degree is called core area.

¹⁷⁶ Here the third degree is called buffer zone.

¹⁷⁷ Called integral reserve (85 ha + 210 ha).

Countries	Reserve	Surface areas	Legal status (foundation text)	Relevant Administration	Management Body	Regulations in the different areas		
						Core area	Buffer zone	Peripheral area
	Port-Cros	1 300 ha	National Park (Decree No. 63-1235 of 1963).	Ministry of Ecology and Sustainable Development	“Port-Cros National Park” Public Institution.	– Spearfishing and RF are forbidden. – CF and scuba diving are authorized but regulated.	None	None
Greece	Alonissos-Vories Sporades	226 500 ha	National Marine Park (Common Ministerial Decision 23537/6-5-03).	Ministry of Environment, Public Works and Physical Planning	Management Authority of National Park of Alonissos in the Northern Sporades.	– RF is forbidden.	– RF is allowed under restrictions (only lines and trolls). – Spearfishing and scuba diving are forbidden. – CF is allowed but under conditions.	– Spearfishing is forbidden. – CF is allowed. RF is allowed under restrictions (only lines and trolls).
Israel	Yam Dor haBonim	530.3 ha	Marine Nature Reserve (2002).	Ministry of the Environment	Nature and National Parks Protection Authority	No information		
Italy	Archipelago Toscano	61 474 ha	National Park (Decree July 21 st , 1989 modified by decree July 22 nd , 1996; and Ministerial Decree 19.12.98).	Ministry of the Environment and Protection of the Territory	“Tuscan Archipelago National Park” public institution.	– Spearfishing, RF, CF, scuba diving are prohibited. ¹⁷⁸	– RF, spearfishing and CF are authorized but under strict conditions. – Scuba diving is allowed. ¹⁷⁹	None

¹⁷⁸ Marine area 1 around the islands (Montecristo, Pianosa, Gorgona, Giannutri & Caprai).

¹⁷⁹ Marine area 2 around the islands (CAprai & Giannutri).

Countries	Reserve	Surface areas	Legal status (foundation text)	Relevant Administration	Management Body	Regulations in the different areas		
						Core area	Buffer zone	Peripheral area
	Isole Egadi	53 992 ha	Natural Marine Protected Area (Decree of 27 December, 1991 modified by decree of 6 August, 1993 and decree of 17 May, 1995).	Ministry of the Environment and Protection of the Territory	Municipality of Favignana (since 2001)	Zone A: – Spearfishing, RF, scuba diving, CF are prohibited.	Zone B: – Spearfishing is not allowed. – RF, CF and scuba diving are regulated.	Zone C: – Spearfishing is forbidden. – RF is regulated. – CF and scuba diving are allowed. Zone D: – RF, scuba diving and CF are allowed. – Nothing on spearfishing.
	Penisola del Sinis	24 800 ha	Protected Marine Area (Decree 12/12/97, integrally substituted by decree 06/09/99, modified by decree 17/07/2003).	Ministry of the Environment and Protection of the Territory	Municipality of Cabras	Zone A (1 136): – RF, spearfishing, scuba diving and CF are forbidden.	Zone B (1 1031 ha): – Spearfishing is forbidden. – RF, scuba diving, CF and anchoring are regulated.	Zone C (24 113 ha): – Spearfishing is forbidden. – RF, scuba diving, CF and anchoring are regulated.
Lebanon	Palm Island	420 ha	Nature Reserve (Gouvernemental law No121 of 1992).	Ministry of Environment	Ministry of Environment	– RF, spearfishing and CF are forbidden. – Scuba diving is regulated.	None	None
Libyan A. J.	None							
Malta¹⁸⁰	Marine area between Rdum Majjiesa and Ras ir-Raheb	8.5 km ²	Protected Marine Area (environment protection act,	Malta Environment and Planning Authority	Should be determined soon.	In progress	In progress	In progress

¹⁸⁰ This MPA is not included within the Figure 3 untitled “status of recreational fisheries and commercial fisheries in the different areas of Mediterranean MPAs”.

Countries	Reserve	Surface areas	Legal status (foundation text)	Relevant Administration	Management Body	Regulations in the different areas		
						Core area	Buffer zone	Peripheral area
			CAP.435, Development planning act, CAP 356, November 18, 2005).					
Morocco	Al Hoceima	19 600 ha	National Park (Decree No. 2/04/781 of 2004).	High Commission for Water Resources, Forests and Fight Against Desertification.	“Al Hoceima National Park” Public Institution.	In progress	In progress	In progress
Monaco	Larvotto	50 ha	Protected area (Sovereign Order No. 6256 of 1978).	Environment, Planning and Building Directorate; Maritime and Airport Police Division; Maritime Affairs Directorate.	Association for Nature Protection in Monaco.	– RF, spearfishing and CF are forbidden. – scuba diving is allowed.	None	None
Slovenia	Strunjan	90 ha	Nature Reserve (Governmental Decree on the Strunjan Landscape Park 2004).	Ministry of Environment and Spatial Planning.	Institute of the Republic of Slovenia for Nature Conservation, Regional Unit Piran.	Zone A (30 ha): – RF, spearfishing, scuba diving and CF are forbidden.	Zone B (60 ha): – RF and spearfishing are forbidden. – CF is regulated. – Scuba diving is allowed.	None

Countries	Reserve	Surface areas	Legal status (foundation text)	Relevant Administration	Management Body	Regulations in the different areas		
						Core area	Buffer zone	Peripheral area
Spain	Isla de Alborán	26 456 ha	Natural Park and Marine Reserve (Law No3/2003).	Environmental Council of the Assembly of Andalucía & Ministry for Agriculture and Fisheries.	General Directorate of the network of Natural Protected areas and Environmental services, Environment Council of the Assembly of Andalucía & Ministry for Agriculture and Fisheries.	– RF is forbidden as CF. – Spearfishing is allowed.	– RF is not allowed but CF is allowed under regulation. – Spear fishing is allowed.	None
	Migjorn de Mallorca	22 332 ha	Marine Reserve (Regional Council for Agriculture and Fishing Order of 2002 modified by Order of 2003).	Autonomous Community of Balearic Islands	General Directorate for fishing.	– Spear fishing, Rf, scuba diving and CF are regulated.	None	None
	Freus d'Eivissa	13 617 ha	Marine Reserve (Decree No. 63 of 1999).	Autonomous Community of Illes Balears.	General Directorate for Fishing.	– Spearfishing, anchoring and scuba diving are forbidden. – RF and CF are authorized but regulated.	None	– Spearfishing is forbidden. – RF, scuba diving and CF are authorized but regulated.

Countries	Reserve	Surface areas	Legal status (foundation text)	Relevant Administration	Management Body	Regulations in the different areas		
						Core area	Buffer zone	Peripheral area
Syrian A.R.	Ras El Bassit	3 000 ha	Protected Area (Resolution N026/T of 1999).	Ministry of Local Administration and Environment; Ministry of Agriculture and Agrarian Reform; Ministry of transportation; Ministry of higher Education.	Unknown	– RF, spearfishing, scuba diving and CF are forbidden.	In progress	None
	Om Al Toyour	1 000 ha	Protected Area (Resolution No. 15/T of 1999).	Ministry of Local Administration and Environment; Ministry of Agriculture and Agrarian Reform; Ministry of transportation; Ministry of higher Education.	Unknown.	– RF, spearfishing, scuba diving and CF are forbidden.	In progress.	None
Tunisia	Zembra & Zembretta	4 700 ha	National Park (Marine and Coastal protected areas in progress).	Ministry of Environment and Sustainable Development.	Coastal Protection and Physical Planning Agency.	– RF, spearfishing and CF are forbidden. – Scuba diving is regulated.	Idem.	– RF and CF are regulated. – Nothing on spearfishing. – Scuba diving is allowed. ¹⁸¹

¹⁸¹ Called here Transition and Sustainable Development Area.

Countries	Reserve	Surface areas	Legal status (foundation text)	Relevant Administration	Management Body	Regulations in the different areas		
						Core area	Buffer zone	Peripheral area
	Archipel de la Galite	450 ha	National Park (Marine and Coastal protected areas in progress).	Ministry of Environment and Sustainable Development.	Coastal Protection and Physical Planning Agency.	– RF, spearfishing, scuba diving and CF are forbidden.	– RF, spearfishing and CF are forbidden.	– Rf and CF are regulated. – Nothing on spearfishing. – Scuba diving is allowed. ¹⁸²
Turkey	Datca-Bozburun	76 300 ha	Specially Protected Area (Special decree).	Ministry for Environment and Forestry.	Authority for the protection of Special Areas.	– RF, spearfishing and CF are forbidden.	None	None
	Kekova	11 500 ha	Specially Protected Area; Nature Protection Area; Archaeological Protection Area (Council of ministers decree No. 90/77 of 1990).	Ministry for Environment and Forestry.	Authority for Specially Protected Areas (Ankara), Regional Directorate of Specially Protected Areas (Antalya).			

¹⁸² Ibid.

APPENDIX 5. UNDERWATER RECREATIONAL FISHING REGULATIONS IN THE MEDITERRANEAN

Country	Underwater recreational fishing regulation
Albania	n.a.
Algeria	<ul style="list-style-type: none"> – For URF, to be more than 16 years of age. – Forhaving the authorization, a medical certificate and an insurance contract are needed (Art. 66 of the Executive Decree No. 03-481 of 13/12/03). – Use of Scuba equipment is forbidden (Art. 67 of the Executive Decree No. 03-481 of 13/12/03). – Limitation of Underwater fishing gears (Art. 68 of the Executive Decree No. 03-481 of 13/12/03). – URF cannot be practice between sunset and sunrise – Use of light for URF is not allowed. – Catching marine organisms taken by trap which belong to other fishermen is prohibited. – Catching crustaceans in any other manner than by hand is prohibited. (Art. 69 of the Executive Decree No. 03-481 of 13/12/03). – Use of pioche or barre de mine or any gears susceptible to change the habitat of species is prohibited (Art. 71 of the Executive Decree No. 03-481 of 13/12/03).
Croatia	n.a.
Cyprus	<ul style="list-style-type: none"> –Use of scuba and underwater flash lighter are strictly prohibited. –Underwater fishing is prohibited in tourists’ areas. (Regulation 17(1) and Regulation 17(2) of the National Fisheries Law.
Egypt	– Underwater fishing is prohibited between sunset and sunrise.
European Union	– Spearguns shall be prohibited if used in conjunction with underwater breathing apparatus or at night from sunset to dawn (Article 8 (4)).
France	<ul style="list-style-type: none"> – For URF, people have to be more than 16 years. – Scuba equipment (autonomous or not) is forbidden. Detention on board of scuba equipment or other similar special equipment is forbidden except derogation. Art 4.III of Decree No. 99-1163 of 21/12/99 – It is forbidden for underwater fishermen to: <ul style="list-style-type: none"> • fish between sunset and sunrise • approach within 150 metres from the commercial vessels • catch marine animals taken by tackles or nets belonging to others fishermen • use light sources • use for catching crustaceansharpoons or special gear for underwater fishing • keep armed spearguns outside water Art 4.IV of Decree No. 99-1163 of 21/12/99 –Underwater fishermen need to indicate his presence by a buoy. Art 4.V of Decree No. 99-1163 of 21/12/99
Greece	<p>For URF it is forbidden to:</p> <ul style="list-style-type: none"> • fish from sunset to sunrise

Country	Underwater recreational fishing regulation
	<ul style="list-style-type: none"> • be younger than 16 years old • fish during month of may • use scuba equipment • remove fish catches from piscatorial tools of other fishermen • have the speargun armed outside of water or on land <p>Use submarine light, nets or harpoon that its force emanates from detonation of matter or other chemical mix. (Presidential Order No. 373 on sport-recreational fishing of July 16 1985).</p>
Israel	n.a.
Italy	<ul style="list-style-type: none"> – Use of scuba equipment is forbidden. – Collect corals, crustaceans and molluscs are prohibited. (Art. 128 bis of the Presidential decree No. 1639/1968). – Safety requirements (Art. 128 ter). – The exercise of underwater recreational fishing is forbidden : – Between sunset and sunrise. – In the port transit area. – In a distance inferior to 100 metres from the boats anchoring outside ports. – In a distance inferior to 100 metres from fisheries installation. – In a distance inferior to 500 metres from beaches frequented by bathers. (Art. 129). – Signage is required. (Art. 130). – Speargun can not be loaded outside water (Art. 131).
Lebanon	<p>It is forbidden to:</p> <ul style="list-style-type: none"> – Approach to 200 m distance boats fishing and also marked fishing nets. – Pick marine animals that are fished by other people’s gear and fishing nets. – Fish lobster by harpoons and spearguns. – Approach to 500 m distance; licenced swimming clubs. – Use of any kind of light. – Keep the speargun loaded outside the water. – Dive during the night. – Fish underwater by using air compressor fixed on a boat. (Art. 5 of Decree No. 1/126 May 23, 2001).
Libyan A. J.	n.a.
Malta ¹⁸³	n.a.
Morocco	– Only snorkel use is allowed.

¹⁸³ There are no special regulations for recreational fisheries.

Country	Underwater recreational fishing regulation
	<ul style="list-style-type: none"> – Angler with a speargun can not approach bathers short of 50 m. Underwater fishing can only be performed in monitored beaches areas. –Way out and return form the port must be declare. – Fishing between sunset and sunrise is forbidden.
Serbia - Montenegro	Sport recreational fishing with underwater gun is prohibited to persons under the age of 16 and between sunset and sunrise (Art. 22 of the Law on Marine Fishery of 2003).
Slovenia	<p>Use of underwater gun within Slovenian waters is strictly prohibited in the conduct of recreational fishing operations (Art. 29 (1) and (2) of the Marine Fisheries Act of 2002).</p> <p>Sport fishing using an underwater gun is prohibited from sunset to sunrise (Art 29 (4) of the Marine Fisheries Act of 2002).</p> <p>Underwater breathing equipment is prohibited with the use of underwater gun (Art 29 (5) of the Marine Fisheries Act of 2002).</p>
Spain	n.a.
Syrian A.R.	n.a.
Tunisia	<ul style="list-style-type: none"> – Need to be more than 16 years old (Art. 16 of Law of 1994). – Performing URF is forbidden in a distance inferior to 500 m from beaches and from swimming areas, from fishery installation (cages, nets, traps..). – Performing URF is forbidden in a distance inferior to 200 m from the jetties and fairways (Art. 8 of Law of 1994). – Use of Scuba equipment is not permitted except for scientific reasons. (Art. 20 of Law of 1994). – Detention on board of scuba equipment and at the same time of underwater fishing gears is forbidden except under derogation (Art. 21 of Law of 1994). – Fishing under sunset and sunrise. – To have loaded the underwater fishing gun outside water. – It is forbidden to use light for URF (Art. 23 of Law of 1994).
Turkey	–Scuba equipment is not permitted.

Note: n.a. = not available.

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The purpose of this study is to provide a snapshot of recreational fisheries legal frameworks within the Mediterranean with a view to promoting homogeneous and comprehensive recreational fisheries management in the Mediterranean. The study reviews the existing laws and regulations concerning recreational fisheries adopted by Mediterranean countries. It provides first an overview of relevant international initiatives regarding the management of recreational fisheries and a summary of marine recreational fisheries within the Mediterranean basin. The core of the study focuses on a comparative analysis of the main management measures adopted by States, including: (i) access regimes to fisheries resources; (ii) conservation measures; (iii) special recreational fisheries regulations; and (iv) monitoring, control and surveillance of recreational fisheries.

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