COMMISSION OF THE EUROPEAN COMMUNITIES

SEC(90) 1136 final

Brussels, 25 July 1990

OUTLINE

OF A

COMMON FISHERIES SYSTEM

IN THE

MEDITERRANEAN

DISCUSSION PAPER

CONTENTS

INTRODUCTION

The exploitation of marine resources gives rise to a whole host of different activities that are often of considerable and even crucial importance in the economies of the coastal regions in the Mediterranean.

The particular geomorphological, oceanographic, political and social characteristics of the Mediterranean have a bearing on all the living resources of the region and determine the manner in which they are exploited.

The growing risks of pollution and steady environmental decline on the one hand and the relatively limited controls on the current fishing activities of coastal States and the fishing fleets of non-coastal States on the other mean that the outlook for the future is very worrying.

There is a growing awareness of the need to implement a policy for the conservation and management of fish stocks in the Mediterranean both to preserve the existing assets in fish stocks and to turn them to good account to the benefit, in particular, of the coastal populations of the region.

In the light of this situation, the Commission considers that attempts to rationalize fishing activities must take as their central pole the need to respect this inescapable environment backdrop, offsetting the burdens on it by specific measures tailored to the individual geographic locations, types of fishing and possible outlets.

The most appropriate response to the prevailing situation would seem to be one which combines various economic, technical and social measures which would be carried out within a cohesive framework, aimed at providing the necessary stimuli for the "remodelling" of the sector with the understanding that the participation and involvement of the populations concerned is the best way of ensuring that this can be achieved in compliance with the stated objectives.

An initial step might be to begin by introducing a common system for the management and conservation of the fish stocks that come under the jurisdiction of the Member States concerned, which would be built around the particular socio-structural features of each region, and to proceed from there, at a second stage, to the integration of this Community system in an international cooperation structure which could work towards the introduction of a fishery policy that would apply to the Mediterranean as a whole.

PART 1: A DESCRIPTION OF SEA FISHING IN THE MEDITERRANEAN

CHAPTER I: THE INTERNATIONAL AND LEGAL CONTEXT

MARITIME AREAS WITHIN THE MEANING OF THE UNITED NATIONS CONVENTION ON THE LAW OF THE SEA

The rights and duties of States as regards exploration, exploitation, conservation and management of the living resources of the seas and oceans have to be seen within the framework of the general principles resulting from the United Nations Convention on the Law of the Sea (UNCLS).

The exercise of these rights and the fulfilment of these duties depends on the legal standing of the maritime areas concerned.

The "territorial sea" is a maritime area over which sovereignty is exercised subject to the conditions laid down by the UNCLS and to other rules of international law.

In the "exclusive economic zone" (EEZ), the coastal State does not have full sovereignty, this zone being rather subject to a specific legal régime under which the rights and jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of UNCLS.

SECTION 1: THE MARITIME AREAS OF THE COASTAL STATES

The particular geopolitical circumstances of the Mediterranean basin have not hitherto led the 18 coastal States, with rare exceptions, to establish, beyond the limits of their territorial seas, EEZs within which fishing activities would come under their jurisdiction.

The current situation regarding the maritime areas set out below is one of stability, where the conditions governing access to the waters concerned and to their living resources have been consolidated for many years now in spite of the rights which coastal States may claim under the principles resulting from the new Law of the Sea.

All the States with a Mediterranean coastline have established territorial seas up to a limit of between 6 and 35 nautical miles, measured from the baselines. The situation of the various coastal States may be summarized as follows:

COASTAL STATE	TERRITORIAL SEA BREADTH (expressed in nautical miles)	NATIONAL LEGAL BASIS
SPAIN	12 miles	1977
FRANCE	12 miles	1971
MONACO	12 miles	na
ITALY	12 miles	1974
YUGOSLAVIA	12 miles	1979
ALBANIA	15 miles	1976
GREECE	6 miles	1936
TURKEY	6 or 12 miles*	1964
CYPRUS	12 miles	1964
SYRIA	25 miles	na
LEBANON	12 miles	na
ISRAEL	6 miles	1956
EGYPT	12 miles	1958
LIBYA	12 miles	1959
TUNISIA	12 miles	1973
MALTA	12 miles	1978
ALGERIA	12 miles	1963
MOROCCO	12 miles	1973

---

* The limit of the territorial sea is set at 6 miles in the Aegean Sea and at 12 miles for all other Turkish coastal areas.

Apart from Malta, which has defined a "fishing zone" of 25 miles, no coastal State has defined an EEZ for a whole host of reasons, the most striking of which are as follows:

- fishing zones with a limit of 200 miles would, in practice, have to be established in most cases on the basis of median lines, the definition of which would undoubtedly lead to numerous conflicts as regards sovereignty between States that are opposite or adjacent to each other;

- the limits of the territorial seas generally lie beyond the continental shelf and the continental slope and thus encompass a large share of available fish stocks, with the exception of highly migratory species.

SECTION 2: NATIONAL LAWS ON FISHING

With the exception of certain provisions relating to large migrant (swordfish) fisheries, it is within the limits of their territorial seas that all the coastal Member States have laid down a certain number of laws and regulations on fishing activities carried out both by their nationals and by foreigners.

A complete summary of the national provisions laid down by the Member States of the Community is set out in the "Country fact sheets" in Annex III. These show that the national provisions regulate not only, to varying degrees, fishing activities as such, but also the conditions governing access to fishing activities (building permits, licences, etc.), as well as laying down rules on fishery products (minimum sizes, hygiene and health conditions, etc.).

Our current knowledge of the situation and the complexity of the relevant standards mean that we are not in a position to undertake any harmonization of those standards, in particular as regards bans and restrictions on fishing. It should, nevertheless, be noted that these bans/restrictions on fishing activities lay down not only the conditions governing access to certain areas but also provide for controls on the use of certain fishing methods, gear or techniques.

SECTION 3: THE SITUATION AS REGARDS INTERNATIONAL COOPERATION

Given the nature of certain parts of the sea-bed (extended continental shelf and slope) and the particularities of certain fish species (large migrants), fishing activities are sometimes carried out beyond the limits of the territorial seas.

Steps should therefore be taken to enable the coastal States and, where possible, the other States that fish in the Mediterranean to cooperate in coordinating the management, conservation, exploration and exploitation of living resources.

As things now stand, there are two international organizations, inter alia, whose field of competence relates to the management and conservation of fish stocks:

* the General Fisheries Council for the Mediterranean (GFCM), an FAO regional organization;

* the International Commission for the Conservation of Atlantic Tunas (ICCAT).

The Community has observer status in the GCFM, and démarches are under way for the Community to become a full member of the FAO. The Community also has observer status in the ICCAT, although two of its Mediterranean coastal Member States are still not members (Italy and Greece). As with the FAO, the Community has made démarches to become a full member of the ICCAT.

CHAPTER II THE SITUATION AS REGARDS THE MEDITERRANEAN FISHERIES

The Mediterranean covers an area of some 2.5 million km^2 and represents nearly 0.8% of the earth's hydrosphere.

The geomorphological and oceanographical features of the Mediterranean including:

- its narrow continental shelf and slope, with the exception of the Golfe du Lion, the Adriatic and the Sicilian Channel;

- the narrowness of the strait leading to the Atlantic Ocean;

- the shape of its coastline (46 000 km);

mean that Mediterranean fish stocks have a number of specific characteristics which determine the manner in which they are exploited.

SECTION 1 DESCRIPTION OF FISH STOCKS AND THE CONDITIONS UNDER WHICH THEY ARE EXPLOITED

Despite the inadequacy of scientific data on the biology of the various species and, above all, on the existing stocks of those species and despite the fact that the available information varies from region to region, it is now possible to outline the main characteristics of Mediterranean living resources, subject to new scientific data and opinions.

SUBSECTION 1 : FISHERY SPECIES AND STOCKS

SPECIES

There is a great number of fishery species in the Mediterranean (better information is available as regards the western part of the basin) and most of these species are also found in the temperate waters of the Atlantic.

Statistics on landings in the Mediterranean list 88 different commercial species, with 59 species of fish, 13 crustaceans and 16 molluscs.

A distinction should be made between three categories of species: demersal, small pelagic and large pelagic.

A. DEMERSAL SPECIES

A very large number of demersal species has been identified in the Mediterranean:
sole, hake, sea bream, pandora, goatfish, monkfish, sea bass, etc.

B. SMALL PELAGIC FISH

These are primarily sardines, anchovies, sardinella, mackerel, horse mackerel and sprats.

C. LARGE PELAGIC FISH

These are the migratory species of the tuna and related families. Six main species are fished in the Mediterranean: bluefin, albacore, frigate mackerel, Atlantic bonito, little tuna and swordfish.

FISH STOCKS

The fish stocks in the Mediterranean have a number of particular population characteristics which can be summarized as follows:

- they often only occur in limited numbers;
- the average size of individuals is often lower than that of their Atlantic counterparts, despite their sometimes higher growth rates;
- their life cycle is shorter than the Atlantic average;

A. DEMERSAL STOCKS

The demersal fisheries are multi-species fisheries, which makes it difficult to direct their activities to target species. Demersal species are fished between the coast and the beginning of the continental slope.

B. SMALL PELAGIC STOCKS

Small pelagic stocks are generally found within the 12 mile coastal band and are normally fairly homogeneous. It should be noted that there are major cyclical variations in sardine and anchovy stocks.

C. LARGE MIGRANT STOCKS

Available technical and scientific information shows that the Mediterranean is the only spawning ground for the bluefin tuna and one of the most important for the swordfish.

It would also seem that there is but one single bluefin and swordfish stock in the Atlantic and the Mediterranean.

SUBSECTION 2 : FISHING CATEGORIES AND GEAR

With the exception of three small specialized fisheries, Mediterranean fisheries can be broken into four main categories: small-boat fishing ("petits métier"), seining, trawling and high-sea fishing.
Given the huge variety of fishing gear used and the numerous species and stocks fished, these four categories have been created solely on the basis of the distance from the coast at which fishing takes place and by excluding all the main types of gear.

A'. SMALL-BOAT FISHING

The fact that demersal stocks are found close to the coasts, and the economic value of certain demersal species, mean that fishing activities have traditionally been concentrated around the coasts and, above all, around numerous landing places. The fishing gear generally used by these fishing fleets is multi-species in nature and the main target species does not generally exceed 30% of the catch. This type of fishing encourages the discarding of species of low commercial value.

This type of inshore fishing accounts for some 90% of fishing vessels in the Mediterranean. It is carried out by small multi-purpose vessels that always operate within the 100 m isobath or in the numerous Mediterranean lagoons (of which there are some 100 with a total area of nearly 850 000 hectares) and whose fishing trips take no more than one day.

Fishing activities are directed primarily at species with a very high commercial value. These include: sea bream, eel, bass, sole, bogue (ox-eye), common dentex (dog's teeth), latern shark (velvet belly), pandora (Spanish sea bream), goatfish, chad, grouper, etc.

It should be noted that recent changes in the vessels fishing these stocks, in particular in the Member States, now enable them to go beyond the 100 m isobath, and to fish for other species such as hake.

B. SEINING

Seine nets are one of the main types of fishing gear used in the Mediterranean. Depending on the country concerned, 40% to 70% of catches are made with seine nets, which are used primarily when fishing for small pelagic fish such as sardine, anchovy, sardinella, sprat, horse mackerel, mackerel, bogue, picarel and sand smelts (silversides).

Apart from the first three species, which are found in large numbers, the other species are less plentiful and tend to be taken as a by-catch.

C. TRAWLING

Trawls are widely used in the Mediterranean and there are two main types: the pelagic or surface trawls and the bottom trawl.

The trawlers used are large, well-equipped vessels that fish in waters of more than 50 m in depth and at a distance of at least 3 km from the coastline on the continental shelf and the upper part of the continental slope. Their fishing trips last for several days.

Pelagic trawlers' target species are sardine and anchovy. Bottom trawls are used for multi-species demersal fishing. Catches include the following main species: hake, goatfish, sole, blue whiting (poutassou), pandora, capelin, picarel, various types of shrimp and prawn, cuttlefish, octopus and squid.

D. HIGH-SEA FISHING

High-sea fishing is concerned primarily with the large, highly-migratory pelagic species such as swordfish, bluefin, albacore and other tuna.

Various types of gear are used such as longlines, drifting gillnets and large seine nets. This type of fishing does not correlate with water depth and is normally carried out more than 20 or 30 km from the coast following fish movements.

Of these types of gear, drifting gillnets, which are used primarily to fish for swordfish, have given rise to major problems given that this method results, with the exception of the target species, in the death of marine mammals (dolphins, sperm whale, etc.) and turtles, certain species of which are protected.

E. OTHER TYPES OF FISHERY

In addition to the above-mentioned fisheries, there are three specialized types of fishery in the Mediterranean for certain species or groups of species. These are the sponge, sea urchin and coral fisheries.

Sponge fishing has traditionally been carried out by Greek fishermen in the eastern and central reaches of the Mediterranean. It is carried out from specialized vessels by divers who collect the various species of sponge from the sea-bed at depths of not more than 60 m.

Sea urchin fishing is carried out only in France using small vessels that operate very close to the coast.

Lastly, red coral, which is of some economic importance, is currently fished mainly in the western part of the Mediterranean at depths of between 15 and 180 M. Coral fishing is carried out from vessels equipped with specialized gear such as the St Andrew's Cross (Croix de St André) or by divers operating independently.

SECTION 2 : SITUATION AND OUTLOOK AS REGARDS THE EXPLOITATION OF FISH STOCKS

It is difficult to give a precise estimate of the situation as regards the exploitation of Mediterranean fish stocks, given their number, the lack of reliable catch figures and of information on the exploitation of the same stocks by different fisheries.

With the exception of fishing for the large pelagic species (tuna and swordfish), which is carried out on the high seas, the nature of the sea bed means that in most cases fishing is carried out on the continental shelf and slope.

It has been estimated that in general demersal stocks are fully exploited while stocks of small pelagic fish (sardines and anchovies) are exploited to a moderate extent. There is little information on the state of exploitation of the large pelagic species.

As regards the shares taken by different countries of stocks of demersal fish and certain small pelagic species, fishing in the Golfe du Lion is carried out by French and Spanish fleets; off the I. de Alboran by Spain, Morocco and Algeria; along the French Ligurian and Corsican coasts by France and Italy; in the Adriatic by Italy, Yugoslavia and Albania; off the western and southern Tunisian coast by Tunisia, Libya and Italy; off the coast of Egypt by its nationals and by Cyprus; and lastly in the eastern part of the Aegean by Greece and Turkey.

The general situation as regards the Community Member States only is set out below.

In the case of Spain, demersal stocks tend in general to be somewhat overexploited and pelagic stocks are fully exploited. If one looks at the situation in more detail, in the northern and central parts of the Spanish Mediterranean coast, hake stocks are fully exploited and blue whiting stocks underexploited; in the southern part all demersal stocks are overexploited; off the Balearic Islands, hake, goatfish and shrimps and prawns are fully exploited. Those species with the greatest commercial value are goatfish, blue whiting, nephrops (Norway lobster or Dublin Bay prawn), hake, shrimps and prawns. There are plentiful stocks of sardine and anchovy, but these have no great commercial value.

In the Golfe du Lion, and in particular in the south-west part, demersal stocks are overexploited (hake, goatfish, sole, common dentex). Sardine stocks are fully exploited in these regions and there is an upward trend in catches; anchovy catches remain generally stable. The largest catches are of blue whiting, goatfish, horse mackerel, sardine, anchovy, mackerel and octopus.

The relief of the eastern French Mediterranean coast up to the Italian border and off the northern part of the Gulf of Genoa (Golfo di Genova) mean that the opportunities for demersal fishing are limited, although fishing activities are still fairly widespread. These activities increase off the north-east of Corsica and between Corsica and the north-western Italian coast (Tuscany) and continue along virtually all the coastline of the Tyrrhenian Sea, resulting in a situation where demersal stocks are

fully exploited and pelagic stocks underexploited (with the exception of tuna). The main catches in these regions consist of sole, hake, bogue, goatfish, mullet, horse mackerel, sardine, anchovy, crustaceans and cuttlefish.

There is only a limited amount of fishing off southern Italy with the exception of the southern Sicilian coast, most fishing effort being concentrated on large trawlers in the Sicilian Channel between Tunisian, Maltese and Italian waters.

The main species caught are goatfish, andora, hake, bogue, sole, common dentex, scorpionfish, horse mackerel, sardine, anchovy, mackerel, crustaceans and cephalopods.

The Adriatic is a fairly enclosed area with particular local conditions that result primarily from the extension of its continental shelf and the eutrophication of its waters. All stocks are shared, mainly between Italy and Yugoslavia, and the level of exploitation of demersal species is high, whereas pelagic species tend to be underexploited owing to the lack of commercial outlets. The main species are sardine, anchovy, carpet shells (vongole), cuttlefish, squid, goatfish and mullet.

No information is available as regards exploitation levels for Greece. Catches of both pelagic and demersal species are constantly growing, in particular of species with a high commercial value such as anchovy, horse mackerel, goatfish, pandora and hake. One estimate suggests a level of exploitation of existing possibilities of some 80%.

The highly-migratory species (tuna and similar species) are currently exploited outside the territorial seas by certain coastal States and by distant-water fishing fleets such as those from Japan and Korea.

The information available on these species is also incomplete and no precise figures exist as to the level of exploitation of the various species.

Nevertheless, fishing for these species is increasing all the time and has recently seen the introduction of such high-performance fishing gear as drifting gillnets.

The highly-migratory species are fished mainly in the western part of the Mediterranean, but fishing activities have also extended recently into the eastern part, in particular for bluefin in light of the price of this species on the Japanese market.

CHAPTER III

SOCIO-ECONOMIC ASPECTS OF THE FOOD FISH INDUSTRY IN THE MEDITERRANEAN

The marine stocks of the Mediterranean give rise to a complex network of activities that are of considerable and even crucial importance in the economies of the coastal regions, the extent of these activities going considerably beyond the 110 000 fishermen employed in the industry.

SECTION 1 : THE FISHING FLEET

The virtually total lack of systems for controlling access to stocks and, even where such systems exist, the lack of harmonization in the data communicated by the countries concerned, mean that it is impossible to get a precise picture of the structures of the fishing fleet.

Nevertheless, it is possible in general terms to define the following main characteristics of the Community fishing fleet:

- large numbers (some 47 000) of small, under-powered vessels;
- the great age of the craft and of the equipment carried, whether fishing gear as such or equipment for conserving and handling catches;
- deficient on-board health and safety conditions.

On the basis of an analysis of socio-economic models of fishing patterns, the situation in the four Member States may be summarized as follows:

- Small-boat fishing (owner-operated) ("petite pêche artisanale") carried out by undecked boats of less than 9 m between perpendiculars, only rarely fitted with an engine; such "family-type" fishing provides a high number of low-paid jobs. In addition, because of its traditional social structures, this sector exhibits a certain inflexibility in the face of external constraints (regulation/controls) and of technical progress. Individualism flourishes under such socio-economic conditions.

- Owner-operated inshore fishing ("pêche moyenne artisanale") is carried out by old and generally obsolete vessels of between 9 and 18m between perpendiculars. The fact that they are less numerous and have, necessarily, by virtue of their size etc. to land their catches in ports, means that their activities can be more easily monitored. It should be noted that certain activities of this section of the Mediterranean fleet are subject to fairly wide-ranging regulations, including bans on fishing and, where access to stocks is controlled (prior authorization of construction, fishing permits, licences, etc.) even a ban on the construction of new vessels.

- High-seas fishing ("pêche hauturière") is carried out by relatively modern, high-performance vessels that generally fish in areas outside territorial seas. Particular mention should be made of the specialized tuna and other large migrant fishing fleet which is in direct competition with the fleets of non-coastal States.

SECTION 2 : LANDINGS

After sustained growth in the 1960s and 70s, landings have levelled off at around 1 million tonnes, including the Black Sea, since 1982-83.

Between 1973 and 1985, landings in the Adriatic, the Ionian Sea and the Aegean increased by some 5% per annum, whilst there were only slight variations or even small falls in landing in the western Mediterranean and the Levant. The increase came not only from landings of small pelagic fish, but also from the main invertebrate and demersal species of the continental shelf. Landings of large pelagic fish also increased, though this was generally attributable to new fisheries or the expansion of existing fisheries, which was not the case for the demersal species. It would seem that landings of species from coastal waters and estuaries did not greatly increase; it is even possible that they fell as a result of pollution and/or the displacement of certain bodies of freshwater and perhaps even the impact of coastal developments on nurseries situated in the vicinity of the shore.

Although the actual figures vary considerably depending on the source consulted, Community production of fresh fish, crustaceans and molluscs in the Mediterranean may be estimated at some 700 000 tonnes with an approximate value of ECU 2 200 million.

Set against total Community production and value of landings (4 700 000 tonnes of food fish with a value of some ECU 6 500 million), the Mediterranean represents some 15% of Community production and 34% of the total value of landings in the Community.

Without wishing to examine the various species in great detail, the figures set out below illustrate, for a number of the main species fished, another feature of the landings, namely the difference in value between the Mediterranean and other fishing areas.

SPECIES	MEDITERRANEAN	ATLANTIC
FRESH SARINES		
Quantity:	100 000 t	180 000 t
Total value:	ECU 44 million	ECU 43.2 million
Value per tonne:	ECU 440/t	ECU 240/t
CEPHALOPODS		
Quantity:	40 000 t	80 000 t
Total value:	ECU 200 million	ECU 80 million
Value per tonne:	ECU 5 000/t	ECU 1 000/t
HAKE		
Quantity:	30 000 t	100 00 t
Total value:	ECU 141 million	ECU 360 million
Value per tonne:	ECU 4 700/t	ECU 3 600/t

SECTION 3 : THE CONTRIBUTION OF AQUACULTURE

The recent expansion in the fish-rearing industry in the Mediterranean would suggest that the market in high-value species such as bass and sea bream, shell fish and penides (shrimps and prawns) could undergo significant changes over a relatively short period of time.

Production from salt water fish farms in the Mediterranean in 1985 has been estimated at:

- 6 000 t of bass and sea bream;
- 11 000 t of mullet;
- 7 000 t of eel.

Forecast production of bass and sea bram for 1992 is of the order of 27 000 tonnes.

Some 92 000 tonnes of mussels were produced in 1986. Mussel production in the Golfe du Lion and the Adriatic is set to grow considerably in coming years as a result of a major programme to expand the mussel-farming industry.

The yields obtained from Mediterranean lagoons are currently estimated at between 100 and 200 kg/ha. Current production from these lagoons is between 20 000 and 30 000 tonnes/year.

SECTION 4 : IMPROVING RETURNS ON FISHERY PRODUCTS

There are two types of processing/marketing structure for fishery products: the "traditional" system and a more modern system.

A. The main features of the traditional system are:

- a highly complex network with numerous middlemen (large number of landing places and the persistence of localised social structures in various regions);
- aging facilities, poor hygiene conditions and obsolete techniques for preparing fishery products;
- heavily dependent on "upstream" activities (the irregular and seasonal nature of landings);
- highly inflexible market structures (highly-localized distribution, restricted elasticity of demand).

B. The mean features of the modern system are:

Inputs are drawn both from local markets and from the national and international market;

- production is intended for the national market and beyond, which exposes it to unrestricted competition;

- Its production structures offer better returns and a better assurance of product quality and wholesomeness.

SECTION 5 : THE SOCIO-ECONOMIC CONTEXT

In areas like the Mediterranean, i.e. closed or semi-closed marine biotopes with fairly densely populated coastlines, the human communities not only have a socio-economic influence on fisherman and the fisheries sector but also on the marine environment (through eutrophication for example) and on fish stocks and their evolution (repercussions on pelagic and benthic ecosystems).

In addition to the increasing demographic pressure in the coastal regions (+ 1.34% per annum) and the consequences this has in terms of urban and industrial development, it should not be forgotten that the Mediterranean region is at the top of the world tourist league (accounting for 33% of international tourism). This tourist activity is concentrated on some 4 000 km of coast and plays a major economic rôle; it pushes up both demand for and the price of fish and thereby increases the pressure on certain fisheries, in particular for demersal species.

PART 2

COMMUNITY MEASURES TO ASSIST SEA FISHERIES IN THE MEDITERRANEAN

When the texts that formed the basis of the common fisheries policy were adopted in 1983, a decision was taken not to include the Mediterranean in certain aspects of the policy for the time being.

This means that, whereas Community rules on fishery markets and structures are fully applicable, those on the conservation and management of fish stocks are not.

This does not, however, mean that Regulation (EEC) No 170/83 establishing a Community system for the conservation and management of fishery resources[1] does not provide any legal basis for the measures that the Community would like to take, nor that the secondary legislation derived from it, for example Regualtion (EEC) No 3094/86 laying down certain technical measures for the conservation of fishery resources,[2] could not also be applied in full in the Mediterranean subject to suitable amendment.

The following proposals therefore proceed from the assumption that the existing provisions of the common fisheries policy could be extended to cover the Mediterranean provided the necessary adjustments are made to reflect the particular circumstances in the Mediterranean and the changes that have occurred in the Community fishing industry.

CHAPTER I
THE STAGES TOWARDS A COMMON SYSTEM AND THE MEANS BY WHICH SUCH A SYSTEM WOULD BE ESTABLISHED

The character of the fishing industry in the Mediterranean and the sensitivity of the coastal States concerned make it essential to draw up a policy that can be implemented in a gradual and harmonious manner.

---

1. OJ No L 24, 27.1.1983, p. 1.
2. OJ No L 288, 11.10.1986, p. 1.

If fish stocks are to be conserved and managed with due regard for the objectives set by our Mediterranean partners for their economic and social development, efficient and effective measures are needed which should be worked out and monitored within a mutually agreed, international framework to ensure that they are fully implemented irrespective of the area of jurisdiction in which the stocks may be found.

The first stage in the construction of such a framework should centre on the rationalization of the Community fisheries, which account for a large part of overall fishing activity in the Mediterranean and are seen by most other coastal States as the reference point for entering into all-embracing discussions with a view to achieving international cooperation in this area.

With this in mind, a series of measures should be brought in to lay the foundation of an overall policy which would take its basic shape both from existing socio-structural situations, whose adjustment should be organized so as to enable the objectives of the future to be achieved, and from the main biological situations either known or to be determined.

These measures, which would need to be implemented in conjunction with each other, should embrace all of the factors involved in a rational management of stocks; these would include, in particular, the following areas.

SECTION 1 REGULATION

Although it is recognized that a large number of the provisions of the common fisheries policy are applicable in full to Mediterranean fisheries, in particular the structural aspects of the policy (Regulation (EEC) No 4028/86 as regards the fishing fleet, aquaculture and artificial reefs and Regulation (EEC) No 4042/89 as regards the processing and marketing of fishery products) and markets policy, the following stages should be carried out:

* Establish a Community position at the highest level taking account of the general principles of the United Nations Convention on the Law of the Sea and existing national legislation on technical procedures for conservation and management in order to provide the basis for Community technical rules on fish stocks in the Mediterranean. Community legislation in this area will also take account of general environmental protection requirements;

* Set up or strengthen cooperation in the field of scientific research between Member States to get a better picture of stocks and to monitor their evolution on a permanent basis;

* Ensure greater coordination between scientific and technical research to make optimum use of the operating budgets of specialized institutes, in particular by avoiding any duplication of research by concentrating primarily on subjects of common interest and by programming research activity;

* Make sure that basic scientific data and research results are systematically distributed, thereby laying the foundations for a Community scientific "observatory" which would later form part of a more integrated scientific institute.

SECTION 2 POLICY-MAKING

* Concerted action between the Member States concerned within the framework of the guidelines laid down by the Council Regulation of 3 November 1976 to introduce, in certain areas, zones of jurisdiction on fisheries outside territorial seas and within which the Community would have the power to lay down rules on the conservation of stocks.

* Any such extension would have to be strictly limited so as to avoid provoking any conflicts over sovereignty with neighbouring coastal States; morever, a compelling need for such zones should be clearly recognized for the purpose of covering a reasonable proportion of stocks found in maritime areas subject to various legal constraints (overlapping territorial seas, high seas, etc).

* In practice, any extensions of jurisdiction on fisheries will concern mainly the geographical areas that fall well short of the median line.

* Extensions of jurisdiction on fisheries will strengthen the management of biological resources and so the rights and obligations of both the coastal State and other States. The measure will have a direct effect on the exploitation and management of certain species, particularly migratory species.

  Since the extension of jurisdiction on fisheries matters by the Member States concerned could lead to similar steps being taken by other countries bordering the Mediterranean and in order to affect fishermen as little as possible, it would be desirable for the Member States concerned to undertake exploratory contacts.

* Promote more active cooperation with certain non-member coastal States as regards the scientific evaluation of joint stocks;

* Strengthen international cooperation within existing organizations (CFCM, ICCAT); in this respect, it would be sufficient for the Community to become a full member of the FAO and of ICCAT rather than its present observer status.

SECTION 3 TECHNICAL ASPECTS

A "model" for stock conservation relating to the gear used rather than to catch limits should be introduced in Community waters.

There are two types of problem which impede the fixing of TACs and allocation of quotas in the Mediterranean.

The first concerns the nature of the fisheries, which fish for a number of species at the same time (multi-species fisheries). This type of fishing makes it impossible to target one particular species so that, if TACs and quotas were fixed for the Mediterranean, there would be considerable "wastage" as a result of throwing back into the sea species for which the quota had been exhausted, since fishing for species not subject to TACs would undoubtedly continue.

The second type of problem relates to the impossibility of carrying out effective inspections in the Mediterranean, whereas inspections of catches (using log books and catch statements) and landings (inspections at auctions) are essential preconditions for a system of TACs and quotas. These difficulities arise both from the nature of fish resources (the composition, number and location of stocks), the structure of the fleet (a large number of small boats) and even the port infrastructure (a very large number of landing points).

In its conclusions on future fisheries policy in the Mediterranean, the Scientific and Technical Committee for Fisheries said in its 16th Report (p. 55 of the French version) that catches of demersal and pelagic fish in the Mediterranean involved a very large number of species and so it did not consider regulation through TACs and quotas to be appropriate.

The model should also cover:

* technical research on the selectiveness of various types of gear;

* a gradual reduction in the use of "towed gear" and of gear that can damage the marine environment; particular mention should be made here of a ban on drifting gillnets in swordfish fishing, which cause the death of marine mammals and turtles, certain species of which are protected;

* the introduction of Community rules on the characteristics and conditions for use of the various types of gear by vessels from the Member States that fish in the Mediterranean, irrespective of the legal status of the area in which they are fishing;

* the conversion of the various fleets to the systematic use of selective gear through the provision of incentive aid under the existing instruments.

SECTION 4 SOCIO-ECONOMIC CONSIDERATIONS

The development of a Mediterranean fishery policy implies complete acceptance by fishermen of the constraints that such a policy will necessarily entail; the extent to which such acceptance can be won will obviously depend on their assessment of the likely "cost-benefit" ratio. For this reason, and given the shortcomings in the existing trade and professional structures, measures should be taken to improve their organization and so create an active pole of collective responsibility that will be consulted in Community decision-making.

(a) Stock management

Responsibility for the implementation and administration of a common policy for the management and conservation of Mediterranean stocks could be entrusted:

- either directly to existing national administrative structures;

- or to bodies composed of the various trade and professional interests, which would enjoy powers delegated by the public authorities. Such bodies already exist in Spain and France ("Cofradias" and the "Comité de l'Ordonnance de 1945"). No similar bodies that could assume such a role would appear to exist in Italy or Greece.

The producers' organizations provided for under the market organization would be unable, as Community rules now stand, to manage binding measures on the management and conservation of fish stocks. What these organizations can do is adopt measures aimed at the rational deployment of fishing activities with the aim of bringing catch patterns more into line with market constraints.

Given the predominant role of coastal fishing, it would seem advisable to encourage the setting-up of bodies that would involve fishermen in stock management so as to win their support for binding measures aimed at keeping the sector viable.

Such producer groupings should qualify for launching aid (a similar scheme to that applied to producers' organizations) and could be a sort of "staging-post" through which all applications for Community aid would have to be channeled (structural aid, etc.).

National or regional bodies have to be approved by the national authorities. Common rules would have to be laid down on the general procedures for approval and the disclosure of information on their activities so as to ensure that the system is homogeneous and transparent.

(b) Market management

Producer organizations have met with varying success in the Mediterranean region.

Pelagic fish (sardines, anchovies and tuna) are, as a rule, fairly well covered by producer organizations, whereas demersal fish have remained on the fringe of their sphere of influence.

This situation is the result both of prevailing socio-economic structures and of the manner in which the products concerned are marketed, which make it difficult to bring large segments of Mediterranean production within the confines of a market organization, and of the fact that very few products are actually covered by Community intervention mechanisms because of their great diversity.

If one takes account of certain socio-economic considerations, it is likely that the assumption of responsibility by producers for marketing their own produce will proceed at a relatively slow pace.

However, the Community must encourage measures aimed at making the market situation more transparent if all the various elements of the common fisheries policy are to be successfully set in place.

Existing Community mechanisms are quite ill-suited to the attainment of these objectives, given the huge variety of species, the fact that ports are so widely scattered and the existence of a plethora of marketing networks, and new types of incentive measures specially designed to meet the needs of Mediterranean producers should be envisaged within the traditional framework of producer organizations as currently constituted under market organization rules.

One of the main blocks to the setting-up of producer organizations in the Mediterranean has been the difficulty of how to finance product marketing. The middlemen already in place act as bankers to fishermen and this prevents producers from breaking out of their situation of financial dependence.

Technical solutions to increase the cash flow of producer organizations should be sought in order to encourage such organizations to develop in the Mediterranean. Such mechanisms could be part-financed by the Community.

The aid effect of such a system would be more or less in proportion to the turnover of the fleets concerned.

(c) Sponge, coral and sea urchin fishing

In light of the particular nature of these localized fisheries, a number of specific measures should be taken to integrate them fully within the Community framework.

More especially as regards sponge fishing and the problems of health and safety conditions and training for fishermen, the Community could propose that any applications that may be made could be assisted through structural measures under the Regional Fund and the Social Fund.

(d) Monitoring the fishing effect

As a first stage and pending the results of scientific and technical investigation, measures should be taken to avoid the risk of further exacerbating the situation as regards stocks; it would therefore seem appropriate to freeze the fishing effort at its present level as a precautionary measure, in particular as regards trawling for demersal fish.

The Commission could subsequently adjusts the level of the fishing effort in line with stocks on the basis of scientific and technical advice.

Such an arrangement could be based on the introduction of a licensing scheme worked out at regional level between the fishermen concerned and the official authorities and would be subject to final approval by the Commission.

Community control could take place at two levels:

- firstly through the setting up of a general framework laying down the responsibilities and duties of all those concerned with implementation of the proposed system;

- secondly through prior control (definition at Community level of the conditions for granting licences) and retrospective checks (inspection of fishing activity by the national authorities and verification by the Commission) on the duties undertaken by responsible bodies appointed by the Community.

(e) Accompanying structural measures

Implementation of this policy involves structural changes which will rationalize fishing activities and increase productivity.

The Commission will implement a structural policy to accompany these changes. It intends to improve assistance provided under Regulations (EEC) No 4028/86 and 4042/89. Where appropriate, the structural Funds will also be able to contribute more specifically to the creation of alternative employment (craft and small businesses) and to financing certain infrastructure works and vocational training.

SECTION 5 INTERNATIONAL COOPERATION

The second stage in the drawing up of an overall policy for the conservation and rational management of stocks is one that must be dealt with in an international context.

The preparation and implementation of such a policy depend on the willingness of the coastal States concerned to cooperate in applying mutually agreed measures that are binding on all concerned.

The most suitable means of getting such a process off the ground would seem to be to convene, at the appropriate time, a diplomatic conference which would be responsible for laying the foundations of an international consultative structure. Such consultation should ensure that what has been achieved by the common policy in the management and conservation of resources under the first stage is not lost. It would be based on the work of an independent scientific institute which would provide the data needed to assess the situation as regards stocks and their likely evolution.

Such an institute could be formed by fusing the FAO bodies responsible for scientific research within the General Fisheries Council for the Mediterranean (GFCM) and the "Community scientific observatory" in a single structure.

CHAPTER II SUMMARY OF MEASURES REQUIRED TO ASSIST FISHERIES

The measures required to set up a common fisheries system in the Mediterranean, in the light of existing common provisions that may be applied in the Mediterranean, can be summarized as follows:

MEASURE No 1: HARMONIZATION OF NATIONAL LAWS

DESCRIPTION

Introduction, at the highest level, of Community legislation based on the national legislation of the four Member States concerned and covering the technical aspects of the conservation of resources in the light of the overall requirements of protection of the environment.

PURPOSE

To create the legal basis for drawing up Community rules on technical aspects of stock conservation, in particular stocks of common interest.

COST/BENEFIT ANALYSIS

This would be the first step towards a common fisheries scheme in the Mediterranean.

There would be no financial consequences for the Community and this measure would precede any Community initiative on technical rules governing fishing activities in these waters.

MEASURE No 2: INTRODUCTION OF FISHING JURISDICTION OUTSIDE TERRITORIAL SEAS

DESCRIPTION:

Mutually agreed measures between the Member States concerned within the framework of the guidelines laid down by the Council Resolution of 3 November 1976 to introduce areas of jurisdiction that extend beyond the limits of the territorial sea.

PURPOSE:

Given that some demersal stocks extend in part beyond the limits of territorial seas and that a significant proportion of fishing activities are carried out beyond these limits, it is necessary to extend the Member States' jurisdiction as regards fishing so that the technical measures taken can be fully effective.

Such an extension of jurisdiction as regards fishing is also an essential prerequisite for the implementation and monitoring of such measures as may be taken.

COST/BENEFIT ANALYSIS:

Significant improvement in the effectiveness of stock management/conservation measures - in particular as regards demersal stocks - and clarification of the scope of those measures for Community fishermen.

This measure has no financial consequences for the Community but must, however, be limited in its scope so as to avoid any conflicts over jurisdiction with neighbouring coastal States.

MEASURE No 3: COORDINATION OF RESEARCH

DESCRIPTION:

- establish and stregthen scientific and technical cooperation between the Member States concerned;

- make the most efficient use possible of research by concentrating work on subjects of shared interest;

- ensure the systematic distribution of scientific data and work.

PURPOSES:

To make better use of the scientific product from the various research centres and to increase the efficiency of the research effort.

Coordinating scientific and technical research would provide the groundwork towards a "scientific observatory".

COST/BENEFIT ANALYSIS:

This measure does entail an additional financial outlay for the Community but will result in a reduced financial burden on the Member States through the phasing out of duplicated research and the pooling of resources (e.g. research vessels).

In addition, research should then be concentrated on subjects of shared interest.

MEASURE No 4: A MODEL FOR THE MANAGEMENT/CONSERVATION OF STOCKS

DESCRIPTION:

Preparation and introduction in Community waters of a "model" for the conservation/management of resoucres that is compatible with conditions in the Mediterranean.

PURPOSES:

Such a "model" should be based on the types of fishing gear used rather than on catch quotas.

In light of the results obtained by Measure No 1, the "model" should be directed towards the introduction of Community rules on the conditions governing access to stocks and for using various types of fishing gear in waters where the Member States have jurisdiction as regards fishing.

COST/BENEFIT ANALYSIS:

The application of such a measure could entail a major restructuring of existing fishing fleets and, in particular, the conversion of those fleets to more selective types of gear. This will have corresponding financial consequences for the Community's structural Funds.

Such a "model" must take account of existing structures and of their inherent inertia.

MEASURE No 5: MONITORING OF FISHING EFFORT

DESCRIPTION:

This measure must be based on the introduction of arrangements governing access to stocks, the outlines of which could be drawn up at Community level but the details of which would have to be worked out at local or regional level by the competent authorities and subsequently approved by the Community.

PURPOSES:

This measure is the keystone of a common fisheries system in the Mediterranean.

The aim is to manage and control all fishing activities in the Mediterranean in waters under the jurisdiction of the Member States concerned as part of an overall, long-term strategy.

COST/BENEFIT ANALYSIS:

This is the most innovatory of the measures proposed but one that has to be taken if the common fisheries system in the Mediterranean is to be implemented.

Given the current situation as regards the exploitation of stocks, this measure would result very rapidly in a significant decrease in rights of access to stocks and a corresponding reduction in the number of vessels in the waters concerned. Such reductions in fishing capacity will entail very considerable expenditure on the part of the Community to minimize their socio-economic impact.

MEASURE No 6: MANAGEMENT BODIES FOR FISHING ACTIVITIES

DESCRIPTION:

The aim of this measure is to create an institutional framework of trade bodies to assume administrative responsibility for the activities of fishing vessels in common waters.

PURPOSES:

The complex nature of the planned measures and predominance of coastal fishing mean that fishing activities will have to be managed in a coordinated but decentralized manner; bodies responsible for managing fishing activities will have to be set up.

Such bodies are necessary to supervise the application of Measure No 5.

COST/BENEFIT ANALYSIS

This measure will require only a small outlay on the part of the Community.

The "cost" of this measure should be seen rather in terms of political expediency, given that trade and professional organizations already exist in the fisheries sector in certain Member States, although their powers do not extend to the management of fishing activities at present.

MEASURE No 7: SPONGE, CORAL AND SEA URCHIN FISHING

DESCRIPTION

Community assistance for investment for investment to improve health and safety conditions in these specialized fisheries and for vocational training.

PURPOSES

Participation by the Community structural Funds in the restructuring of these activities.

COST/BENEFIT ANALYSIS

Integration of these specialized fisheries into the Community structural policies will speed up the modernization they require.

MEDITERRANEAN

I

Inventory of Stocks by Country

*

Spain

France

Greece

Italy

*

Algeria

Egypt

Israel

Libya

Morocco

Tunisia

Turkey

Yugoslavia

SPAIN: SPAIN (Mediterranean part)

Continental shelf (0-180m) 44 100 km^2 Length of Coastline 2 600 km

Production of fishery products: 1987 132 336 tonnes (North and Centre 51%, South 17%, Balearic Islands 2%)

Catch composition 1987

Small pelagic	67%
Demersal.....	24%
Cephalopods.....	7%
Tunas.....	2%

Main species fished

- small-boat fishing: dentex, sea breams, groupers, comber, scorpion-fishes, mullet, cephalopods, bivalves, spiny lobster.
- seine fishing: sardine, anchovy
- trawl fishing : goatfish, hake, blue whiting, shrimps and prawns, nephrops
- high-sea fishing: swordfish, bluefin, albacore, bonito.

Pelagic stocks: Sonar estimate (tonnes) Exploitation situation

All stocks..... Fully exploited

Sardine: Gulf of Vera (1987): 2 393; Alicante (1987): 5 174: Velencia (1987):

185 946; Catalonia (1985): 18 175; South (1988): 15 566; Balearic Islands (1984): 9 400

Anchovy: Gulf of Vera (1984) 1 057; Alicante (1987): 89; Valencia (1987): 3 795; Catalonia (1984): 10 717; South (1988) : 119

Demersal stocks:	Exploitation situation
North and Centre: hake	Fully exploited
blue whiting	Under-exploited
South: (all stocks)	Over-exploited
Balearic Islands: hake, goatfish, shrimps and prawns	Fully exploited

Fleet: 6 819 vessels

Type of vessel	No	Power (HP)	Length (m)
Small boats	4 893		
Seiners	551	84 650	
Trawlers	1 230	524 652	
High-sea vessels	145		

No of fishermen: +- 27 000

COUNTRY: FRANCE (Mediterranean part)

Continental shelf (0-180m) 20 450 km^2 Length of coastline: 741 km

Production of fishery products: 1987 42 290 tonnes

Catch composition	1987
Pelagic species(excl.tunas)	50%
Demersal species	40%
Tunas	10%

Catch distribution

Main species fished

- Small-boat fishing(xx)	Catfish, sea bream, sole, eel
- seine fishing	Sardine and anchovy
- trawl fishing (demersal fish)	Hake, goatfish, sole, dentex, sea breams
- high-sea fishing:	Bluefin

Pelagic stocks: Estimate — Exploitation situation

Sardine: MSY(x); 20 000 - 40 000 t/year — Stock fully exploited, perhaps even under-exploited

Demersal stocks: — Exploitation situation

All stocks: MSY(x): 9 800 t/year — Over-exploited

Fleet: 3 308 vessels

Type of vessel	No	Power (HP)	Length (m)
Small boats	3 041	20 - 150	6 - 12
Seiners	38	150 - 250	16
Trawlers	207	200 - 699	16 - 22
High-sea vessels	22	400 - 800	27

No of fishermen: ± 5 000

x MSY = maximum sustainable yield

xx At sea and in lagoons.

COUNTRY: GREECE

Continental shelf (0-180m) 57 000 km^2 Length of coastline: 15 000 km

Production of fishery products: 1987 108 058 tonnes

Catch composition	1987
Small pelagic	52%
Demersal	35%
Molluscs	6%
Tunas	4%
Crustaceans	3%

Catch distribution	
Aegean Sea	92%
Ionian Sea	4%
Tunas	4%

Main species fished

- small boat fishing: dentex, sea breams, goatfish, scorpionfish, horse mackerel lesser forkbeard (tadpole fish), sole
- seine fishing: sardine, anchovy, horse mackerel, sardinella
- trawl fishing: hake, goatfish, pandora, blue whiting, capelin, horse mackerel, picarel, cephalopods, shrimps and prawns
- high-sea fishing: swordfish, bluefin, albacore

Pelagic stocks: Exploitation situation

N/A

Demersal stocks: Exploitation situation

Pandora, goatfish, hake Fully or greatly over-exploited

Fleet: 20 180 vessels

Type of vessel	No	Power (HP)	Length (m)
Small boats	19 354	low	4 - 13
Seiners	376	160	11 - 20
Trawlers	450	260	+14
High-sea vessels(temporarily)	± 486	115	9 - 14

No of fishermen: ± 39 000

COUNTRY: ITALY

Continental shelf (0-180m) 120 740 km^2 Length of coastline: 8 000 km

Production of fishery products: 1987 440 441 tonnes

Catch composition 1987

	Whole country	Adriatic	Ionian	Ligurian + Turrhenian
Molluscs	35%	45%	25%	23%
Demersal	33%	23%	46%	42%
Small pelagic	21%	30%	20%	27%
Crustaceans	6%	2%	9%	8%
Tunas	4%			

Catch distribution

Trawlers	44%
Small boats	34%
Seiners	22+

Main species fished

- small-boat fishing: scorpionfishes, groupers, comber, dentex, sea breams, cephalopods, bivalves
- seine fishing: sardine, anchovy, mackerel
- trawl fishing: Demersal: blue whiting, hake, lesser forkbeard, picarel, capelin, dentex, sea breams, goatfish, gurnards, scorpionfishes, sole, cephalopods, shrimps and prawns, nephrops Pelagic: sardine, anchovy
- high-sea fishing: swordfish, bluefin, albacore

Pelagic stocks:	Exploitation situation
All stocks	Under-exploited

Demersal stocks:	Exploitation situation
All stocks	Fully exploited

Fleet: ± 19 200 vessels

Type of vessel	No	Power (HP)	Length (m)
Small boats	13 300	450 000	-
Seiners	1 500	123 000	-
Trawlers	4 400	771 000	-

No of fishermen: ± 49 600

COUNTRY: ALGERIA

Continental shelf (0-180m) 10 700 km^2 Length of coastline: 1 200 km

Production of fishery products: 1987 70 000 tonnes

Catch composition	1987
Sardine	55%
Demersal	33%
Anchovy	9%
Tunas	3%

Catch distribution

Seine	70%
Trawl and small boats	30%

Main species fished

- seine fishing: sardine, anchovy
- trawl fishing: (demersal species): pandora, goatfish, hake, shrimps and prawns, sole
- high-sea fishing swordfish, bluefin

Pelagic stocks: Sonar estimate (tonnes) Exploitation situation

All stocks: between 192 000 - 326 000 Under-exploited

Demersal stocks: Estimate (tonnes) Exploitation situation

All stocks (between 15-800m): 63 000 Fully exploited

Fleet: 1 481 vessels

Type of vessel	No	GRT	Power (HP)	Length (m)
Small boats	716	10	8	4 - 9
Seiners	460	10-30	180	13 - 18
Trawlers	305	30-300	250-400	16 - 21

No of fishermen: N/A

COUNTRY: EGYPT (Mediterranean part)

Continental shelf (0-180m) 29 200 km^2 Length of coastline: 1 100 km

Lagoons etc. 2 012 km^2

Production of fishery products: 1987 Sea 25 000 tonnes
Lagoons etc. 109 100 tonnes

Catch composition	1987
Demersal species	48%
Small pelagic	38%
Crustaceans	8%
Molluscs	6%

Catch distribution

- small-boat fishing: sea bream, groupers, mullet
- seine fishing: sardinella, horse mackerel, sand smelts
- trawl fishing: goatfish, sole, cuttlefish, gurnards, shrimps and prawns

Main species fished in lagoons etc

Tilapia, eel, sea bream, bass, sole, mullet, shrimps and prawns

Pelagic stocks: Estimate Exploitation situation

Small pelagic: ± 40 000

Demersal stocks: Exploitation situation

Goatfish: ± 60 - 350 tonnes

Fleet: Sea: 2 418 vessels Lagoons etc: 3 000 - 4 000 vessels

Type of vessel (sea)	No	Power (HP)	Length (m)
Small boats	1 582	0 - 50	
Seiners	51	10 -150	
Trawlers	785	50 -200	

No of fishermen: Sea: ± 15 700 Lagoons etc.: 14 000 - 16 000

COUNTRY: ISRAEL

Continental shelf (0-180m) 3 250 km^2 Length of coastline: 200 km

Production of fishery products: 1987 4 800 tonnes

Catch composition	1987
Demersal	59%
Small pelagic	33%
Tunas	5%
Crustaceans	3%

Catch distribution	1984
Seine fishing	30%
Small boat fishing	34%
Trawl fishing	28%

Main species fished

- small-boat fishing: sea perch, groupers, comber, mullet, dentex, sea breams, jacks, horse mackerel, greater amberjack (yellowtail)
- seine fishing: sardinella, horse mackerel, dentex, sea breams, mullet
- trawl fishing: goatfish, hake, dentex, sea breams, (brushtooth) lizardfisn shrimps and prawns
- high-sea fishing: little tunas

Pelagic stocks:	Exploitation situation
Small pelagic	Under-exploited
Large pelagic	Not exploited

Demersal stocks:	Exploitation situation
Hake, groupers, deep-water pink shrimps (Parapenaus longirostris)	Under-exploited
Goatfish, kuruma prawns (Penaeus japonicus)	Fully exploited

Fleet: 442 vessels

Type of vessel	No	GRT	Power (HP)	Length (m)
Small boats	398		10-40	5-10
Seiners	24		80-120	11-14
Trawlers	20		150-350	14-27
Total		4 230	9 560	

No of fishermen: ± 500

COUNTRY: LIBYA

Continental shelf (0-180m) 55 000 km^2 Length of coastline: 1 700 km

Production of fishery products: 1987 8 000 tonnes

Catch composition	1987
Sardinella	64%
Bluefin	4%
other fish	32%

Catch distribution

Seine fishing	67%
Small boat fishing	21%
Trawlfishing	8%
Madraques (tuna traps)	4%

Main species fished

- small-boat fishing: pandora, common dentex, sea bream, goatfish, she drum, monkfish, mullet, skates
- seine fishing: sardinella, sardine, horse mackerel, bogue, mackerel
- trawl fishing: goatfish, dentex, sea breams, horse mackerel, mackerel, chub mackerel
- madraques (tuna traps): bluefin

Pelagic stocks: - Estimate — Exploitation situation

Possibility of increasing the exploitation of small pelagic stocks

Demersal stocks:	Exploitation situation
Coastal area and continental shelf	Under-exploited
Continental slope	Not exploited

Fleet: 277 vessels

Type of vessel	No	Power (HP)	Length (m)
Small boats	250		
Trawlers	27		

No of fishermen: ± 500

COUNTRY: MOROCCO (Mediterranean part)

Continental shelf (0-180m) 4 480 km^2 Length of coastline: 450 km

Production of fishery products: 1987 34 180 tonnes

Catch composition	1987
Demersal	65%
Small pelagic	30%
Tunas	5%

Catch distribution

Main species fished

- seine fishing: sardine, anchovy, mackerel, sardinella
- trawl fishing: (demersal species): horse mackerel, bogue, black spot sea bream, pandora
- high-sea fishing; swordfish

Pelagic stocks: Sonar estimate (tonnes) Exploitation situation

All stocks: 80 000 tonnes Under-exploited
MSY(x) : 25 000 tonnes

Demersal stocks: Estimate Exploitation situation

All stocks Over-exploited
MSY(x) 9 000 tonnes

Fleet: 2 415

Type of vessel	No	Power (HP)	Length (m)
Small boats	1 900	5 - 15	5 - 6
Long-liners	225	35 - 100	6 - 14
Seiners	122	300-400	20 - 25
Trawlers	40	150-430	23 - 30
Mixed	38	-	-

No of fishermen: N/A

(x) MSY : Maximum sustainable yield

COUNTRY: TUNISIA

Continental shelf (0-180m) 77 300 km^2 Length of coastline: 1 300 km

Production of fishery products: 1987 99 169 tonnes

Catch composition	1987
Small boat fishing	40%
Trawl fishing	35%
Seine fishing	25%

Catch distribution

Main species fished

- seine fishing: sardine, sardinella, horse mackerel, mackerel, anchovy
- trawl fishing: (demersal species): goatfish, hake, dentex, sea breams, cuttlefish, octopus
- high-sea fishing: bluefin, little tuna

Pelagic stocks:	Sonar estimate (tonnes)	Exploitation situation
All stocks: 580 000		Under-exploited

Demersal stocks:	Estimate	Exploitation situation
Northern area (all stocks)		Under-exploited
Eastern and southern area (all stocks)		Fully exploited

Fleet: 10 300 vessels

Type of vessel	No	GRT	Power (HP)	Length (m)
Small boats	9 758	3	8 - 60	7 - 11
Seiners	252	13	30 - 280	7 - 18
Trawlers	253	20-150	110-600	13 - 30
High sea vessels	37	-	-	-

No of fishermen: N/A

COUNTRY: TURKEY

Continental shelf (0-180m) (in the Mediterranean) 26 100 km^2

Length of coastline: (in the Mediterranean) 5 200 km

Production of fishery products: 1987 670 894 tonnes (in the Mediterranean: $\pm$ 40 000 tonnes)

Catch composition	1987
Small pelagic	40%
Demersal	38%
Molluscs	15%
Crustaceans	7%

Catch distribution

Black Sea	92%
Mediterranean	5%
Tunas	3%

Main species fished

- small-boat fishing: pandora, sea bream, Couch's sea bream, white bream, picarel, barracuda, bass, goatfish, scorpionfishes, goby, sand smelts, mullet
- seine fishing: sardine, anchovy, horse mackerel, bonito, tuna
- trawl fishing: sole, goatfish, blue whiting, skates, scorpionfishes, gurnards
- high-sea fishing: swordfish, bluefin

Pelagic stocks:	Exploitation situation
All stocks	Under-exploited

Demersal stocks:	Exploitation situation
All stocks	Under-exploited

Fleet: 2 229 vessels

Type of vessel	No	GRT	Power (HP)	Length (m)
Small boats	1 781	1-5	1-20	5-10
Seiners	336	10-50	20-100	10- 20
Trawlers	112	10-50	100	10-20

No of fishermen: N/A

COUNTRY: YUGOSLAVIA

Continental shelf (0-180m) 43 500 km^2 Length of coastline: 6 100 km

Production of fishery products: 1987 56 000 tonnes

Catch composition	1987
Small pelagic	54%
Demersal	10%
Molluscs	4%
Tunas	1%
Crustaceans	1%

Catch distribution	
Seine fishing	68%
Trawl fishing	26%
Small-boat fishing	4%
High-sea fishing	2%

Main species fished

- small-boat fishing: dentex sea bream, scorpionfishes, mullet, sand smelts
- seine fishing: sardine
- trawl fishing: pelagic: sardine
  demersal: hake, picarel, goatfish, dentex sea breams, nephrops, cephalopods

Pelagic stocks: Exploitation situation

Demersal stocks: Exploitation situation

Fleet: 135 vessels

Type of vessel	No	Power (HP)	GRT	Length (m)
Seiners	91		4 880	
Trawlers	44		3 112	

No of fishermen: N/A

M E D I T E R R A N E E

II

INVENTAIRE DES CAPTURES PAR REGION/PAYS

(ESPECES PRINCIPALES)

INDEX

Engins de pêches

B = Barrages
C = Chaluts
CA = Casiers
CF = Chaluts de fond
CP = Chaluts pélagiques
CR = Carrelets
D = Dragues
E = Eperviers
FD = Filets dérivants
FF = Filets de fond
FL = Filets lamparos
FM = Filets maillants
FMD = Filets maillants dérivants
FMF = Filets maillants de fond
FMP = Filets maillant pélagiques
H = Hamepons
LM = Lignes à main
LT = Lignes de traîne
M = Madragues
N = Nasses
P = Pieges
PD = Palangres dérivantes
PSM = Pêche sous marine
R = Râteaux
SC = Sennes coulissants
SP = Sennes de plage
T = Tremails
TF = Tremails de fond
TU = Turluttes
V = Verveux

Démersales/pélagique/etc.

B = Benthique
BP = Bathypélagique
D = Démersal
E = Epipélagique
MP = Mésopélagique
N = Néritique
P = Pélagique
SD = Sémidémersal
SP = Sémipélagique

Tendances des captures

S = Stables
M = Montent
D = Descendent

Espèce ou groupe d'espèces

NCA = non compris ailleurs

Endroit de pêche

C = Côte
HM = Haute mer
PC = Plateau continental
T = Talus

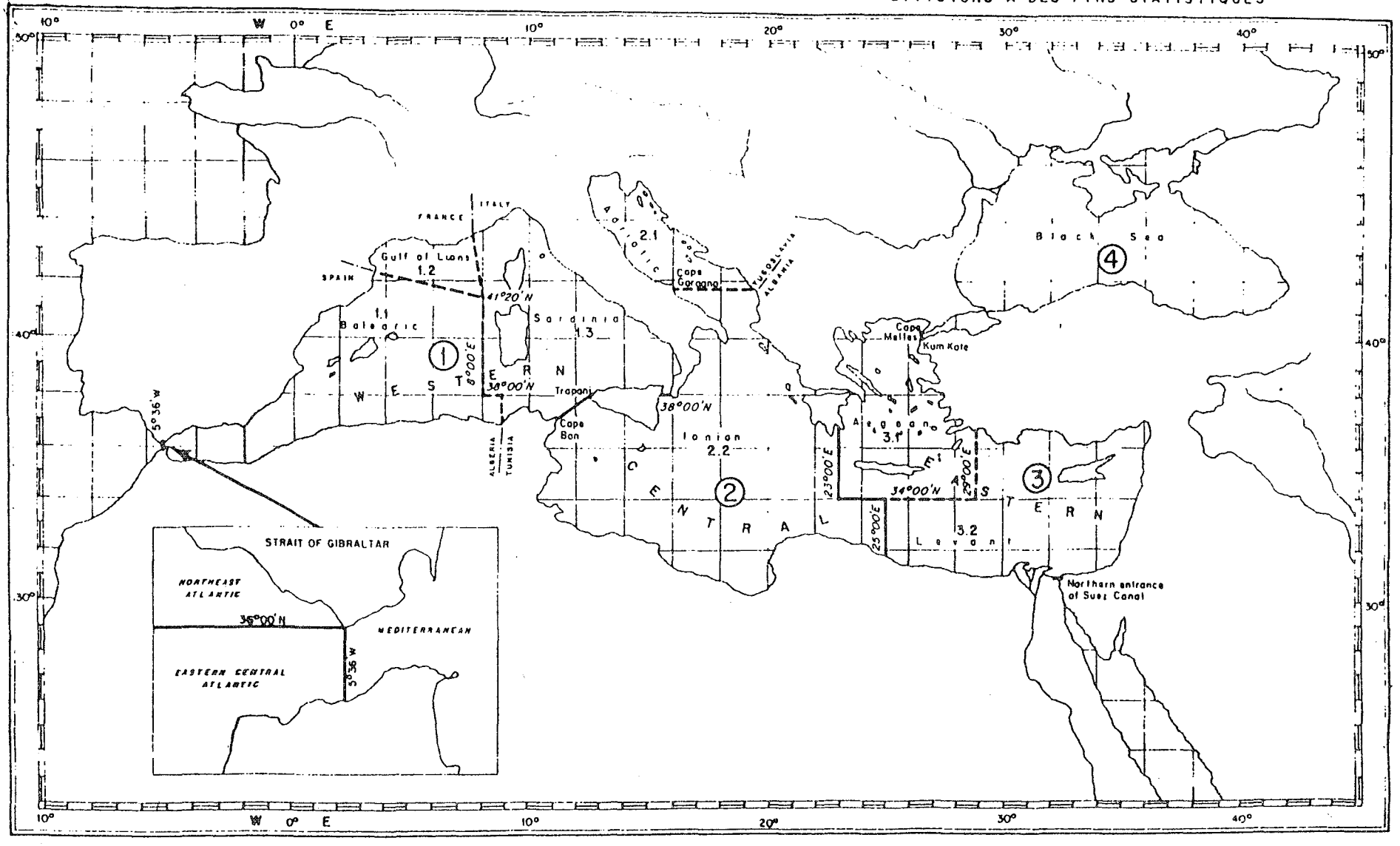
Pays

ALB = Albanie
ALG = Algerie
CHY = Chypre
EGY = Egypte
ESP = Espagne
FRA = France
GRE = Grèce
ISR = Israel
ITA = Italie
LEB = Liban
LIB = Libye
MAL = Malte
MAR = Maroc
SYR = Syrie
TUN = Tunisie
TUR = Turquie
YUG = Yougoslavie

Lh

CHART
MEDITERRANEAN AND BLACK SEA (FISHING AREA 37 - GFCM)
GEOGRAPHICAL LIMITS OF SUBAREAS AND
DIVISIONS FOR STATISTICAL PURPOSES

CARTE
MÉDITERRANÉE ET MER NOIRE (ZONE DE PÊCHE 37 - CGPM)
LIMITES GÉOGRAPHIQUES DES SOUS-ZONES ET
DIVISIONS À DES FINS STATISTIQUES



A Total catch by countries or areas
Captures totales par pays ou zones

Mediterranean and Black Sea
Méditerranée et mer Noire

Countries or areas Pays ou zones	1975 mt	1976 mt	1977 mt	1978 mt	1979 mt	1980 mt	1981 mt	1982 mt	1983 mt	1984 mt	1985 mt	1986 mt	1987 mt
Albania	7000F	7000F	7000F	7000F	7000F	7000F	7000F	7000F	5910F	5282	9211	8785	9279
Algeria	37693	35122	43475	34143	38678	48000F	56000F	64500F	65000F	65500F	66000F	70000F	70000F
Bulgaria	8623	9941	10172	12017	15105	17869	19782	17298	13533	15405	17029	12940	12008
Cyprus	919	1052	1189	1245	1283	1305	1426	1556	1933	2204	2380	2552	2555
Egypt	5380	6179	6678	11765	19938	17466	17790	11208	12538	11365	16561	19334	25000F
France	48090	50520	44215	40250	44799	46392	55785	57760	52666	47520	50406F	46054F	44290F
Gaza Strip	4586	4069	4525	4700	1913	972	1139	1179	798	1553	416	500F	500F
Gibraltar	-	-	-	-	-	-	-	-	-	-	-	-	-
Greece	64031	73705	72190	73620	73786	73038	75458	85734	81980	89089	95025	102403F	108058F
Israel	3200	3300	3600	3500	3200	3702	3660	4072	4173	4596	4556	4990F	480CF
Italy	354560	361185	362323	388911	397917	406672F	430298F	451378F	461702F	480488F	492998F	463790F	44044?
Japan	1263	969	524	63	102	121	101	965	683	1057	925	351	282
Lebanon	2400	1700	1600F	1700F	1650F	1700F	1500F	1400F	1300F	1200F	1400F	1500	1700
Libya	4803	4059	2046	4355	4500	5200	6418	7425F	7500F	7800F	7800F	7800F	8000F
Malta	1506	1552	1459	1064	1306	1054	921	1197	993	1216	2508	1111	1003
Monaco	1500F	1500F	1500F	1500F	1500F	1500F	1500F	1500F	1500F	1500F	1500F	1500F	1500F
Morocco	15380	23872	33844	32153	35580	27332	40747	33166	32314	41788	35056	37713F	34180F
Romania	6316	7746	6142	7114	7621	10292	9997	10374	13105	13894	14268	15834	14015
Spain	141418	150576	145203	149974	152096	149254	153264	162994	162379	154623	140296	143332	132336
Syria	826	1279	1310	1361	1056	976	923	1123	1009	1206	1000F	505F	700F
Tunisia	44498	49007	53712	54601	57278	60073	57376	62708	67051	74748	88908F	92618F	99169F
Turkey	79324	132511	146145	222312	327441	394589	438396	469840	518591	520435	532599	539595	760894F
USSR	335749	354587	241988	278174	313614	389628	333459	449046	395392	416807	341670	387587	258986
Yugoslavia	32190	34676	35055	37373	33857	34873	44396	40309	53156	48423	49277	51371	56158
Total	1201255	1316107	1225895	1368895	1541220	1699008	1757336	1943732	1955206	2007699	1971789	2012165	2085854

A-0 Total catch by countries or areas
Captures totales par pays ou zones

Area 37 - Total tuna
Zone 37 - Total thons

Countries or areas Pays ou zones	1975 mt	1976 mt	1977 mt	1978 mt	1979 mt	1980 mt	1981 mt	1982 mt	1983 mt	1984 mt	1985 mt	1986 mt	1987 mt
Algeria	706	560	616	536	1186	1480F	1720F	1980F	1996F	2012F	2030F	2150F	2150F
Bulgaria	-	40	44	11	1	13	191	4	24	1	1	-	13
Cyprus	12	79	136	102	125	96	110	157	50	103	112	189	131
Egypt	3	0	1	17	10	3	2	23	14	48	62	68	90F
France	1600	3800	3182	1597	1578	1701	2350	4878	3693	3757	5360	3510	4390
Greece	658	511	550	610	712	809	1840	4344	3940	4604	4068	4109	4109
Israel	200	300	300	200	170	105	35	110	35	60	259	284F	273F
Italy	12483	16142	12901	12159	11107	12045	11320	11383	11567	21003	22013	20831	21046
Japan	1263	969	524	63	102	121	101	965	683	1055	925	351	282
Lebanon	200	140	130F	140F	140F	140F	130F	120F	110F	100F	120F	130	150
Libya	634	799	336	677	424	398	271	310F	300F	300F	300F	300F	300F
Malta	290	206	287	184	181	245	217	228	107	123	172	153	169
Morocco	362	1178	978	522	275	72	387	119	194	156	176	411	39
Romania	-	2	-	-	-	-	-	-	-	-	-	-	-
Spain	2996	3508	3678	4464	4392	4283	4790	6091	6030	8646	6333	4202	2528
Syria	-	102	105	109	89	80	73	90	80	96	80F	41F	57F
Tunisia	737	1049	1187	1176	1108	2646	1830	2317	1859	1968	2414	2524F	2504F
Turkey	3398	3366	4714	5683	9153	15314	24935	26843	30258	8782	15229	13176	18800
Yugoslavia	200	605	986	1113	802	664	428	562	1270	889	1107	829	722
Total	25742	33356	30655	29363	31555	40215	50730	60524	62210	53703	60761	53258	57753

II - 6

A-11 Total catch by divisions and by countries or areas
Captures totales par divisions et par pays ou zones

Balearic
Baléares

Countries or areas Pays ou zones	1975 mt	1976 mt	1977 mt	1978 mt	1979 mt	1980 mt	1981 mt	1982 mt	1983 mt	1984 mt	1985 mt	1986 mt	1987 mt
Algeria	36987	34562	42859	33607	37492	46520F	54280F	62520F	63004F	63488F	63970F	67850F	67850F
Gibraltar	-	-	-	-	-	-	-	-	-	-	-	-	-
Japan	-	-	-	-	0	0	0	0	0	2	0	0	0
Morocco	15018	22694	32866	31631	35305	27260	40360	33047	32120	41632	34880	37302F	34141F
Spain	138422	147068	141525	145510	147704	144971	148474	156903	156349	145977	133963	139130	96867
Total	190427	204324	217250	210748	220501	218751	243114	252470	251473	251099	232813	244282	198858

(disk 10.25)

II - 7

BALEARES (1) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé(P) ou non (NP)
Sole commune (Solea vulgaris)	B	AIG(1) 450 MAR 40 ESP 431 TOT 921	M M S		SP C FMF	C - 200m		NP ?
Merlan bleu (Micromesistius poutassou)	MP	ESP 7.946	D		SC, CF PF, T LM	PC - HM		P?
Merlu européen (Merluccius merluccius)	D, EP	MAR(1) 150 ESP 2.800 TOT 2.950	M S		CF, CP HM, PF SC, LM	C, T - 1000m		P
Gadiformes	D, EP, P	AIG(1) 3.140 MAR 20 ESP 1.686 TOT 4.846	S S M		Divers	C - HM		NP
Dorade rose (Pagellus bogaraveo)	D	ESP(2) 1.392	S		C, FMF, PF, LM	C - T (800m)		NP + P
Pageot commun (Pagellus erythrinus)	D	AIG(1) 6.650 ESP(2) 507	S D		SP, SC CF, FMF PF, N, LM	C - 300m		NP ?
Bogue (Boops boops)	D, EP	MAR(1) 2.040 ESP 3.050 TOT 5.090	S S		SP, SC, FL FMF, FMP, PF PD, LM, P	PC		P

BALEARES (2) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Rougets NCA (Mullidae)	D	ALG(1) 1.970 MAR(1) 540 ESP 1.870 TOT 4.380	S M S		SP, CF, FMF, LM V, PSM	10-100m		P
Baudroie (Lophius piscatorius)	D	MAR(1) 68 EPS 1.010 TOT 1.078	S S		C, FMF, PF	0 - 500m		P ?
Chinchards noirs (Trachurus spp)	P-D	ALG(1) 2.890 MAR 3.630 ESP 3.617	S S D		SP, SC, FL, CF, CP FMF, PF, B LM	C - 600m		P
Sardinelles (Sardinella spp)	P	ALG(1) 2.340 MAR(1) 2.439 TOT 4.779	S S		SC, SP, FL FMF, CF CP, B	C - 350m		P
Sardine européenne (Sardina pilchardus)	P	ALG(1)38.850 MAR(1)18.820 ESP 21.821 TOT 79.491	M M S		SC, SP, FL, CF, CP, FMP, B	C		P

BALEARES (3) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Anchois européen (Engraulis encrasicolus)	P	AIG(1) 5.950 MAR(1) 2.280 ESP 9.346 TOT 17.576	S D D		SC, SP, C FL, B, M	C		P
Maquereau commun (Scomber scombrus)	P	AIG(1) 930 ESP 5.029 TOT 5.959	S M		SP, SC, FL FMF, FMP CF, CP, LM LT,PF,PD, B	C - HM		P
Raies NCA (Rajiformes)	B	AIG(1) 400 MAR(1) 202 ESP 480 TOT 1.082	S S		C, FMF, PF	C - HM		NP P
Decapodes natantia NCA	D	AIG(1) 2.870 MAR 110 ESP 1.159 TOT 4.139	S M S		C, T, SP, N, B etc	C - HM		NP (P)
Crustacés marins NCA (Crustacea)	D	AIG(1) 100 MAR(1) 7 ESP 2.300 TOT 2.407	M S M		Divers	C - HM		NP P

disk 10.25)

II-10

BALEARES (4) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Sèiches, sépioles (Sepia spp, Sepiola spp)	D	MAR 110 ESP 900 TOT 1.010	D D		CF, T, FMF, CA N, LM, B	C - 450m		P
Encornets (Loligo spp)	N SP	MAR(1) 10 ESP 1.040 TOT 1.050	D S		CF, FL, CP LM, T, SC, FMP	C		P
Pieuvres, poulpes (Octopodidae)	B	MAR(1) 390 ESP 5.128 TOT 5.518	D D		CF, FMF T	C - T		NP (P)

(1) Estimation FAO
(2) Captures 1986

A-12 Total catch by divisions and by countries or areas
Captures totales par divisions et par pays ou zones

Gulf of Lions
Golfe du Lion

Countries or areas Pays ou zones	1975 mt	1976 mt	1977 mt	1978 mt	1979 mt	1980 mt	1981 mt	1982 mt	1983 mt	1984 mt	1985 mt	1986 mt	1987 mt
France	44168	44817	40412	37438	42292	43240	51981	51443	47497	42228	43411F	40905F	38632
Monaco	1500F	1500F	1500F	1500F	1500F	1500F	1500F	1500F	1500F	1500F	1500F	1500F	1500
Spain	...	...	...	...	...	...	...	...	...	...	...	...	32941
Total	45668	46317	41912	38938	43792	44740	53481	52943	48997	43728	44911	42405	73073

(disk 10.25)

II - 12

GOLFE DU LION (1) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Anguille d'Europe (Anguilla anguilla)	Catadrome	FRA 1.191 (1)	S		V, N, B C, FM PF, LM	C		NP
Sole commune (Solea vulgaris)	B	FRA(2) 540 ESP 162	S		SP C FMF	C - 200m		P
Capelan de Medit. (Trisopterus minutus)	D	FRA(1) 935	D		C, FMF PF, LM	C		P
Merlan bleu (Micromesistius poutassou)	MP	ESP 1.472	M		SC, CF PF, T LM	PC - HM		P
Merlu européen (Merluccius merluccius)	D, BP	FRA 1.635 (1)(2) ESP 1.958	S		CF, CP FM, PF SC, LM	C, T - 1000m		P
Congre commun (Conger conger)	D	FRA 709 (1)(2)	S		SP, C FMF, PF P, LM	PC		P
Bars (Dicentrarchus spp)	D	FRA 724 (1)	S		SP, SC, CF CP, FMF, PF PD, LM, LT	C		P
Bogue (Boops boops)	D, EP	FRA 535 (1)(2) ESP 309	S		SP, SC, FL FMF, FMP PF, PD, P, LM	PC		P

LS

GOLFE DU LION (2) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Rougets NCA (Mullidae)	D	FRA(1)(2)325 ESP 1.031	S S		SP, CF, FMP, LM V, PSM	10-100m		P
Mulets NCA (Mugilidae)	D	FRA 1.120 (1)(2)	S		SC, SP, E, CF,CP,C,T FMP,P,B,LM	C		P
Athérinidés (Atherinidae)	P	FRA 660 (1)(2)	M		SP, CR, FM C, N	C		P
Chinchards noirs (Trachurus spp)	P-D	FRA(1) 649 ESP 730 TOT 1.379	S		SP, SC, FL, CF, CP FMP, PF, B LM	C - 600m		P
Sardine européenne (Sardina pilchardus)	P	FRA 17.302 (1) ESP 14.400 TOT 31.702	S M		SC, SP, FL, CF, CP, FMP, B	C		P
Anchois européen (Engraulis encrasicolus)	P	FRA(1) 2.609 ESP 3.250 TOT 5.859	S M		SC, SP, C FL, B, M	C		P

(disk 10.25)

GOLFE DU LION (3) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Maquereaux (Scomber spp)	P	FRA(1) 926 ESP 1.100 TOT 2.026	S		SP, SC, FL FMF, FMP CF, CP, LM LT, PF, PD, B	C - HM		P
Huitre portugaise (Crassostrea angulata)	B	FRA 7.222 (1)	M		D, CF	C		NP ?
Moule mediterran. (Mytilus galloprovincialis)	B	FRA 3.921 (1)	S		D, CF, R	C		NP ?
Pieuvre (Octopus vulgaris)	B	FRA(1) 659	S		CF, FMF T	C - T		P
Pieuvres, poulpes (Octopodidae)	B	ESP 1.500			CF, FMF T	C - T		P

(1) Estimation FAO
(2) Captures 1986

A-13 Total catch by divisions and by countries or areas
Captures totales par divisions et par pays ou zones

Sardinia
Sardaigne

Countries or areas Pays ou zones	1975 mt	1976 mt	1977 mt	1978 mt	1979 mt	1980 mt	1981 mt	1982 mt	1983 mt	1984 mt	1985 mt	1986 mt	1987 mt
France	2322	1903	621	1215	929	1451	1454	1439	1476	1535	1635	1639F	1268F
Italy	85406	96272	87068	69265	69439	70135	92054	87765	97674	88482	96420F	98866F	101693
Tunisia	6031	5867	7118	5913	8480	7418	6943	7839	8947	10375	11476F	9090F	8352F
Total	93759	104042	94807	76393	78848	79004	100451	97043	108097	100392	109531	109595	111313

SARDARIDS (1) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1985 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Sole commune (Solea vulgaris)	B	ITA 1.369 TUN(1) 41 TOT 1.410	S S		SP, C, FMF	C - 200m		P
Merlan bleu (Micromesistius poutassou)	MP	ITA 1.444	S		SC, CF PF, T LM	PC- HM		P?
Merlu européen (Merluccius merluccius)	D, EP	ITA 5.437 TUN(1) 52 TOT 5.489	S D		CF, CP FM, PF SC, LM	C, T - 1000m		P
Bars (Dicentrarchus spp)	D	FRA(1) 27 ITA 1.548 TUN(1) 35 TOT 1.610	S M S		SP, SC, CF CP, FMF, PF PD, LM, LT	C		P
Sars, saraillons NCA (Diplodus spp)	D	ITA 1.288 TUN(1) 37 TOT 1.325	M M		FMF, PF, LM SP, N, P, CF, CP, PD	C		P
Dentes NCA (Dentex spp)	D	ITA 1.050	M		FMF, PF, LM N, SP, CF, LT	20 - 250m		P ?
Bogue (Boops boops)	D, EP	ITA 3.082 TUN(1) 94 TOT 3.176	S S		SP, SC, FL FMF, FMP PF, PD, P LM	PC		P

SARDAIGNE (2) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Dentés, spares etc NCA (Sparidae)	D	ITA 1.257 TUN(1) 756 TOT 2.013	M M		FMP, PF, N, LM SP, CF, LT	PC, T		P
Mendoles picarels (Spicara spp)	D	ITA 1.513 TUN(1) 32 TOT 1.545	M D		SP, SC, CP CF, PF, FMP LM, P	C - 170m		P
Rougets NCA (Mullidae)	D	FRA(1)(2) 94 ITA 3.160 TUN(1) 247	D S S		SP, CF, FMP, LM V, PSM	10 - 100m		P
Rascasses NCA (Scorpaenidae)	D	ITA 1.932 TUN(1) 42 TOT 1.974	M S		CF, PF, FMP, LM	PC		P
Baudroies NCA (Lophiidae)	D	ITA 1.151	M		C, FMP, PF	0 - 500m		P ?
Mulets NCA (Mugilidae)	D	FRA(1)(2) 49 ITA 3.004 TUN(1) 179	S S S		SC, SP, E, CF,CP,C,T FMP,P,B,LM	C		P
Chinchards noirs (Trachurus spp)	P-D	ITA 2.792 TUN(1) 437 TOT 3.229	S S		SP, SC, FL CF, CP, FMP, PF, B LM	C -600m		P

(disk 10.25)

SARDAIGNE (3) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat du stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Sardine européenne (Sardina pilchardus)	P	FRA(1) 8 ITA 8.461 TUN(1) 1.851 TOT 10.320	S M S		SC, SP, FL, CF, CP, FMP, B	C		P
Anchois européen (Engraulis encrasicolus)	P	ITA 9.045 TUN(1) 19 TOT 9.064	S S		SC, SP, C FL, B, M	C		P
Maquereaux (Scomber spp)	P	ITA 1.849 TUN(1) 249 TOT 2.098	S D		SP, SC, FL FMP, FMP CF, CP, LM LT, PF, PD, B	C - HM		P
Emissoles (Mustelus spp)	D	ITA 1.293 TUN 61 TOT 1.354	D S		FMP, TF, PF PD, PD, CF, CP	C - PC - T		P
Raies NCA (Rajiformes)	B	ITA 1.424 TUN(1) 108 TOT 1.532	S S		C, FMP, PF	C - HM		P
Langoustine (Nephrops norvegicus)	D	ITA 1.032	M		CF, CA	T		P?

SARDAIGNE (4) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Décapodes natantia NCA	D	ITA 4.101 TUN(1) 202 TOT 4.307	S S		C, T, SP, N, B etc	C - HM		P ?
Crustacés marins NCA (Crustacea)	D	ITA 2.103	M		Divers	C - HM		P
Moule mediterran. (Mytilus galloprovincialis)	B	FRA(1) 136 ITA 9.100 TOT 9.236	S M		D, CF, R	C		P ?
Petite praire (Venus gallina)	B	ITA 1.088	M		D, R, CF	C		P ?
Seiche commune (Sepia officinalis)	D	FRA(1) 31 ITA 2.736 TOT 2.767	S M		CF, T, FMF, CA N, LM, B	C - 450m		P
Encornets (Loligo spp)	N SP	ITA 1.934	M		CF, FL, CP LM, T, SC, FM2	C		P ?
Toutenon commun (Todarodes sagittatus)	SD	ITA 1.199	M		CF, TU	C - HM		P ?
Pieuvre (Octopus vulgaris)	B	ITA 3.911	M		CF, FMF T	C - T		P ?

(1) Estimation FAO
(2) Captures 1986

A-21 Total catch by divisions and by countries or areas
Captures totales par divisions et par pays ou zones

Adriatic
Adriatique

Countries or areas Pays ou zones	1975 mt	1976 mt	1977 mt	1978 mt	1979 mt	1980 mt	1981 mt	1982 mt	1983 mt	1984 mt	1985 mt	1986 mt	1987 mt
Greece	1365	1863	1885	862	...	...	...	...	...	...	...	...	...
Italy	163884	154355	176714	207017	221249	222762F	231438F	237108F	240079F	238305F	222881F	205140F	198192
Yugoslavia	31990	34071	34069	36260	33055	34209	43968	39747	51886	47534	48170	50542	55436
Total	197239	190289	212668	244139	254304	256971	275406	276855	291965	285839	271051	255682	253628

ADRIATIQUE (1) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Sole commune (Solea vulgaris)	B	ITA 2.287	M		SP C FMF	C - 200m		P
Merlu européen (Merluccius merluccius)	D, EP	ITA 2.356 YUG 893 TOT 3.249	M M		CF, CP FM, PF SC, LM	C, T - 1000m		P
Gadiformes	D, EP, P	ITA 1.359	M		Divers	C - LM		P
Bogue (Boops boops)	D, EP	ITA 786 YUG 519 TOT 1.305	S S		SP, SC, FL FMF, FMP PF, PD, P LM	PC		P
Rougets NCA (Mullidae)	D	ITA 2.075 YUG 259 TOT 2.334	M S		SP, CF, FMF, LM V, PSM	10-100m		P
Gobies (Gobiidae)	D	ITA 2.122	D		S, FF, CF N, B, LM	C		P
Mullets NCA (Mugilidae)	D	ITA 3.063	M		SC, SP, E CF,CP,C,T FMP,F,B,LM	C		P
Athérinidés (Atherinidae)	P	ITA 2.287 YUG 186 TOT 2.473	S S		SP, CR, FM C, N	C		P

(disk 10.25)

ADRIATIQUE (2) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Chinchards noirs (Trachurus spp)	P-D	ITA 2.633 YUG 1.106 TOT 3.739	S D		SP, SC, FL CF, CP, FMF, PF, B LM	C -600m		P
Sardine européenne (Sardina pilchardus)	P	ITA 28.754 YUG 40.780 TOT 69.534	S M		SC, SP, FL, CF, CP, FMP, B	C		P
Sprat (Sprattus sprattus)	P	YUG 3.883	M		SP, SC, FL CF, CP, B	C		P
Anchois européen (Engraulis encrasicolus)	P	ITA 6.604 YUG 451 TOT 7.055	D D		SC, SP, C FL, B, M	C		P
Maquereaux (Scomber spp)	P	ITA 856 YUG 911 TOT 1.767	M S		SP, SC, FL FMF, FMP CF, CP, LM LT, PF, PD, B	C - HM		P
Raies NCA (Rajiformes)	B	ITA 842 YUG 229 TOT 1.071	M M		C, FMF, PF	C - HM		P
Langoustine (Nephrops norvegicus)	D	ITA 1.328 YUG 347 TOT 1.675	S D		CF, CA	T		P

ADRIATIQUE (3) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Squille (Squilla mantis)	D	ITA 2.490	D		CF, T, N, D, SP	C - T		P
Moule mediterran. (Mytilus galloprovincialis)	B	ITA 65.000 YUG 1.076 TOT 66.076	M M		D, CF, R	C		NP ?
Petite praire (Venus gallina)	B	ITA 34.445	M		D, R, CF	C		NP ?
Seiche commune (Sepia officinalis)	D	ITA 5.882 YUG 190 TOT 6.072	D S		CF, T, FMF, CA N, LM, B	C - 450m		P
Encornets (Loligo spp)	N SP	ITA 1.052 YUG 197 TOT 1.249	D D		CF, FL, CP LM, T, SC, FMP	C		P
Toutenon commun (Todarodes saggitatus)	SD	ITA 3.544	M		CF, TU	C - HM		P
Pieuvre (Octopus vulgaris)	B	ITA 982 YUG 159 TOT 1.141	S S		CF, FMF T	C - T		P
Elédones	B	ITA 1.382	S		CF, FMF, T	30 - 500m		P

A-22 Total catch by divisions and by countries or areas
Captures totales par divisions et par pays ou zones

Ionian
Ionienne

Countries or areas Pays ou zones	1975 mt	1976 mt	1977 mt	1978 mt	1979 mt	1980 mt	1981 mt	1982 mt	1983 mt	1984 mt	1985 mt	1986 mt	1987 mt
Albania	7000F	7000F	7000F	7000F	7000F	7000F	7000F	7000F	5910F	5282	9211	8785	9279
Greece	5777	5260	5476	5860	5642	-	6164	7064	5805	17566	4334	3402F	4045F
Italy	92787	94416	85640	100470	96122	101730F	95486F	115122F	112382F	132698F	151684F	138953F	119510
Libya	4169	3260	1710	3678	4076	4802	6147	7115F	7200F	7500F	7500F	7500F	7700F
Malta	1216	1346	1172	880	1125	809	704	969	886	1093	2336	958	834
Tunisia	37730	42080	45394	47512	47690	50009	48603	52552	56245	62405	75018F	81004F	88313F
Total	148679	153362	146392	165400	161655	164350	164104	189822	188428	226544	250083	240602	229681

IGUANES (1) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1985 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Sole commune (Solea vulgaris)	B	GRE 17 ITA 1.753 TUN(1) 363 TOT 2.133	S D S		SP C FMF	C - 200m		P
Merlu européen (Merluccius merluccius)	D, BP	GRE 176 ITA 17.300 MAL 11 TUN(1) 463 TOT 17.950	D D D M		CF, CP FM, PF SC, LM	C, T - 1000m		P
Merous NCA (Epinephelus spp)	D	GRE 17 ITA 1.730 MAL 1 TUN(1) 645 TOT 2.393	S M S S		P, LM, H, P, CF FM	C		P
Serranides NCA	D	GRE 35 MAL 23 TUN(1) 1.320 TOT 1.378	M S S		P, LM, H, P, CF FM	C		P
Sars, sparaillons NCA (Diplodus spp)	D	GRE 26 ITA 701 TUN 328 TOT 1.055	S S S		SP, CF, FMF PF, N, CP P, LM, PD	C		P

IONIENNE (2) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Denté commun (Dentex dentex)	D	GRE 44 ITA 2.017 MAL 1 TOT 2.062	S D S		SP, CF, PF FMF, N LM, LT	C		P
Bogue (Boops boops)	D, EP	GRE 500 ITA 2.388 MAL 102 TUN(1) 837 TOT 3.827	M D S M		SP, SC, FL FMF, FMP PF, PD, P LM	PC		P
Saupe (Sarpa salpa)	D	GRE 10 TUN(1) 1.066 TOT 1.076	S M		SP, SC, FL FMF, P LM	C		NP ?
Dentés, Spares NCA (Sparidae)	D	GRE 5 ITA 635 MAL 1 TUN(1) 6.744 TOT 7.385	S D S S		SP, CF, PF FMF, N LM, LT	PC, T		P
Mendoles, Picarels (Spicara (maena) spp)	D	GRE 1.197 ITA 688 MAL 12 TUN(1) 284 TOT 2.181	S S S S		SP, SC, CF, CP, PF FMF, LM P, B	C		P
Rougets NCA (Mullidae)	D	GRE 195 ITA 4.519 MAL 6 TUN(1) 2.206 TOT 6.926	M D D S		SP, CF, FMF, LM V, PSM	10-100m		P

IONIENNE (3) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendences captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Rascasses NCA (Scorpaenidae)	D	GRE 40 ITA 3.764 MAL 2 TUN(1) 367 TOT 4.173	S S S S		CF, PF FMF, LM	PC		P
Baudroie (Lophius piscatorius)	D	GRE 1 ITA 1.895 MAL 2 TOT 1.898	D D D		C, FMF, PF	0 - 500m		P
Mulet à grosse tête (Mugil cephalus)	D	GRE 12 TUN(1) 1.236 TOT 1.248	S S		SC, SP, E CF, CP, C T, FMF, F B, LM	C		NP ?
Mulets NCA (Mugilidae)	D	ITA 1.159 TUN(1) 1.586 TOT 2.745	S S			C		P
Chinchards noirs (Trachurus spp)	P-D	ITA 4.297 TUN(1) 3.888 TOT 8.185	D M		SP, SC, FL CF, CP, FMF, PF, B LM	C -600m		P
Sardinelles (Sardinella spp)	P	LIB(1) 5.100 TUN(1) 1.868 TOT 6.968	S S		SC, SP, FL FMF, CF CP, B	C - 350m		P

(disk 10.25)

II - 28

IONIENNE (4) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Sardine européenne (Sardina pilchardus)	P	GRE 215 ITA 10.237 TUN(1) 16.499 TOT 26.951	D S S		SC, SP, FL, CF, CP, FMP, B	C		P
Anchois européen (Engraulis encrasicolus)	P	GRE 88 ITA 4.092 TUN(1) 166 TOT 4.346	D D S		SC, SP, C FL, B, M	C		P
MaquereaUX (Scomber spp)	P	GRE 1 ITA 2.269 TUN(1) 2.215 TOT 4.485	 S S		SP, SC, FL FMF, FMP CF, CP, LM LT, PF, PD, B	C - HM		P
Emissoles (Mustelus spp)	D	GRE 21 ITA 2.218 TUN(1) 539 TOT 2.778	S D S		CF, CP, FMF TF, PF, PD	C - PC - T		P
Raies NCA (Rajiformes)	B	GRE 7 ITA 2.061 MAL 9 TUN(1) 963 TOT 3.040	D D D S		C, FMF, PF,	C - IM		NP ? P
Langoustine (Nephrops norvegicus)	D	ITA 2.188	M		CF, CA	T		P?

IQUERNE (5) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Décapodes natantia NCA	D	GRE 10 ITA 6.310 MAL 24 TUN(1) 4.026 TOT 10.370	S D D M		C, T, SP, N, B, etc	C - HM		P
Moule mediterran. (Mytilus gallo-provincialis)	B	ALB 1.330 ITA 11.300 TOT 12.630	D M		D, CF, R	C		NP ?
Petite praire (Venus gallina)	B	ITA 1.747	M		D, R, CF	C		NP ?
Seiches, Sépioles (Sepia spp, Sepiola spp)	D	GRE 29 MAL 4 ITA 2.820 TUN(1) 6.410 TOT 9.263	S D S M		CF, T, FMF, CA, N, LM, B	C - 450m		P
Encornets (Loligo spp)	N SP	GRE 35 ITA 2.366 MAL 1 TUN(1) 233 TOT 2.635	D S D M		CF, FL, CP LM, T, SC, FMP	C		P
Toutenon commun (Todarodes sagittatus)	SD	ITA 2.669	S		CF, TU	C +HM		P ?

74

(disk 10.25)

IONIENNE (6) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Pieuvre (Octopus vulgaris)	B	GRE 26 ITA 5.291 TOT 5.317	S S		CF, FMF T	C - T		P ?
Pieuvres, poulpes (Octopodidae)	B	GRE 2 MAL 9 TUN(1) 8.025 TOT 8.036	D D M		CF, FMF T	C - T		P

(1) Estimation FAO

A-31 Total catch by divisions and by countries or areas
Captures totales par divisions et par pays ou zones

Aegean
Egée

Countries or areas Pays ou zones	1975 mt	1976 mt	1977 mt	1978 mt	1979 mt	1980 mt	1981 mt	1982 mt	1983 mt	1984 mt	1985 mt	1986 mt	1987 mt
Greece	56231	66071	64279	66288	67432	72229	67454	74326	72235	66919	86623	94892F	99904F
Turkey	3435	6373	5984	12643	18728	18095	18549	14755	18248	21733	22763	22656	25932F
Total	59666	72444	70263	78931	86160	90324	86003	89081	90483	88652	109386	117548	125836

Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce part*gé (P) ou non (NP)
Sole commune (Solea vulgaris)	B	GRE 1.328	M		SP C FMP	C - 200m		NP ? P
Merlan bleu (Micromesistius poutassou)	MP	GRE 1.645 TUR(1) 322 TOT 1.967	M M		SC, CF PF, T LM	PC - HM		P
Merlu européen (Merluccius merluccius)	D, EP	GRE 2.849	S		CF, CP FM, PF SC, LM	C, T - 1000m		NP ?
Oblade (Oblada melanura)	D	GRE 1.182 TUR(1) 126 TOT 1.308	M S		SP, SC, FMP FMP, CF, LM LT, N	C		P
Bogue (Boops boops)	D, EP	GRE 7.755 TUR(1) 1.217 TOT 8.972	M S		SP, SC, FL FMP, FMP PF,PD,P,LM	PC		P ?
Mendoles, Picarels (Spicara (maena) spp)	D	GRE 6.181 TUR(1) 329 TOT 6.510	S M		SP, SC, CF, CP, PF FMP,LM,P,B	C		P ?
Rouget de roche (Mullus surmuletus)	D	GRE 1.702 TUR(1) 322 TOT 2.024	S M		SP, CF, SC FMP, LM V, H	C - 400m		NP ? P
Rougets NCA (Mullidae)	D	GRE 1.543 TUR(1) 989 TOT 2.532	S M		SP, CF, FMP, LM V, PSM	10-100m		NP ? P

~~EGEE~~ (2) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Grondins NCA (Triglidae)	B	GRE 1.699 TUR(1) 59 TOT 1.758	M M		CF, FMF, PF, LM, SP	PC		NP ? P
Mulet à grosse tête (Mugil cephalus)	D	GRE 1.954	S		SC,SP,CF,CP C,E,T,FMF F, B, LM	C		NP ?
Chinchard d'Europe (Trachurus trachurus)	P-D	GRE 648 TUR(1) 449 TOT 1.097	D S		SP, SC, FL CF, CP, FMF, PF, B LM	C -600m		NP ? P
Chinchard à queue jaune (Trachurus mediterraneus)	P	GRE 8.429 TUR(1) 273 TOT 8.702	S D		SP, SC, FL CF, CP, FMF, PF, B LM	HM - C		NP ? P
Sardine européenne (Sardina pilchardus)	P	GRE 9.466 TUR(1) 9.234 TOT 18.700	D D		SC, SP, FL, CF, CP, FMP, B	C		P
Anchois européen (Engraulis encrasicolus)	P	GRE 24.648 TUR(1) 176 TOT 24.824	M S		SC, SP, C FL, B, M	C		P
Maquereau espagnol (Scomber japonicus)	P	GRE 4.832 TUR(1) 1.905 TOT 6.737	S S		SP, SC, FL FMF, FMP CF, CP, LM LT,PF,PD, B	C - HM		P

SL

~~ESEE~~ (3) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Langoustine (Nephrops norvegicus)	D	GRE 1.102	M		CF, CA	T		P?
Decapodes natantia NCA	D	GRE 1.453 TUR(1) 391 TOT 1.844	M S		C, T, SP, N, B etc	C - HM		P
Moule mediterran. (Mytilus gallo-provincialis)	B	TUR(1) 1.581	M		D, CF, R	C		NP ?
Petite praire (Venus gallina)	B	TUR(1) 2.074	M		D, R, CF	C		NP ?
Seiche commune (Sepia officinalis)	D	GRE 997 TUR(1) 261 TOT 1.258	S M		CF, T, FMF, CA N, LM, B	C - 450m		NP ? P
Encornets (Loligo spp)	N SP	GRE 838 TUR(1) 358 TOT 1.196	M M		CF, FL, CP LM, T, SC, FMP	C		NP ? P
Pieuvres, poulpes (Octopodidae)	B	GRE 1.120 TUR(1) 406 TOT 1.526	S M		CF, FMF T	C - T		NP ? P

(1) Estimation FAO

A-32 Total catch by divisions and by countries or areas
Captures totales par divisions et par pays ou zones

Levant
Levant

Countries or areas Pays ou zones	1975 mt	1976 mt	1977 mt	1978 mt	1979 mt	1980 mt	1981 mt	1982 mt	1983 mt	1984 mt	1985 mt	1986 mt	1987 mt
Cyprus	907	973	1053	1143	1158	1209	1316	1399	1883	2101	2268	2363	2424
Egypt	5377	6179	6677	11748	19928	17463	17788	11185	12524	11317	16499	19266	24910F
Gaza Strip	4586	4069	4525	4700	1913	972	1139	1179	798	1553	416	500F	500F
Israel	3000	3000	3300	3300	3030	3597	3625	3962	4138	4535	4297	4706F	4527F
Lebanon	2200	1560	1470F	1560F	1510F	1560F	1370F	1280F	1190F	1100F	1280F	1370	1550
Syria	826	1177	1205	1252	967	896	850	1033	929	1113	920F	464F	643F
Tunisia	-	11	13	...	...	...	...	...	...	...	...	...	...
Turkey	2272	3397	4365	10030	7670	8391	12897	11173	15556	12159	11872	14585	14140F
Total	19168	20366	22608	33733	36176	34088	38985	31211	37018	33876	37552	43254	48694

(disk 10.25)

II-36

LEVANT (1) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Pàgre rouge (Sparus pagrus)	D	CHY 22 EGY(1) 740 TUR(1) 297 TOT 1.059	S M S		SP, CF, PF FMF, LM, N	C - PC		P
Bogue (Boops boops)	D, EP	CHY 381 EGY(1) 1.180 ISR(1) 253 TUR(1) 108 TOT 1.922	S M S D		SP, SC, FL FMF, FMP PF, PD, P LM	PC		P
Mendoles, Picarels (Spicara (maena) spp)	D	CHY 1.022 LEB 20 TUR(1) 241 TOT 1.283	M M M		SP, SC, CF, CP, PF FMF,LM,P,B	C		NP? P
Rougets NCA (Mullidae)	D	CHY 211 EGY(1) 1.240 CAZA STRIP(1) 15 ISR(1) 453 LEB 100 SYR(1) 42 TUR(1) 583 TOT 2.644	S M S S M S M		SP, CF, FMF, LM V, PSM	10-100m		NP ? P

LEVANT (2) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Percomorphes démersaux NCA (Perciformes)	D	CHY 43 EGY(1) 1.060 GAZA STRIP(1) 15 ISR(1) 542 SYR 182 TUR 277 TOT 2.119	S M S S S D		Divers	C - HM		P
Becunes (Sphyraena spp)	P	EGY(1) 110 ISR(1) 168 LEB 75 SYR(1) 20 TUR(1) 852 TOT 1.225	M S M D D		SC, FVF, LM, LT	C -100m		NP ? P
Carangides NCA (Carangidae)	P	CHY 30 ISR(1) 285 LEB 125 SYR(1) 21 TUR(1) 775 TOT 1.236	S S M S M		C, S, F, L, P, B	C - HM		NP ? P
Athérinidés (Atherinidae)	P	EGY(1) 1.710 TUR(1) 1.113 TOT 2.823	M M		SP, CR, FM C, N	C		NP ?
Chinchards noirs (Trachurus spp)	P-D	EGY 1.330	M		SP, SC, FL, CF CP, FVF, PF, B LM	C - 600m		NP ? P

LEVANT (3) Espèce ou groupes d'espèces	Démersale ou pélagique	Captures totales 1987 mt	Tendances captures 1985-1987	Effort de pêche n° des bateaux	Engins de pêche utilisés	Endroit de pêche	Etat de stock prévisions	Stock/ espèce partagé (P) ou non (NP)
Sardinelles (Sardinella spp)	P	EGY(1) 6.440 GAZA STRIP(1) 250 ISR(1) 711 SYR(1) 126 TOT 7.527	M S S S		SC, SP, FL FMF, CF CP, B	C - 350m		P
Sardine européenne (Sardina pilchardus)	P	TUR(1) 1.721	M		SC, SP, FL, CF, CP, FMP, B	C		P
Maquereau espagnol (Scomber japonicus)	P	GAZA STRIP(1) 70 ISR(1) 121 TUR(1) 1.575 TOT 1.766	S S M		SP, SC, FL FMF, FMP CF, CP, LM LT,PF,PD, B	C - HM		P
Decapodes natantia NCA	D	CHY 3 EGY(1) 1.560 ISR(1) 147 TUR(1) 1.046 TOT 2.756	S M S S		C, T, SP, N, B, etc	C- HM		P
Seiches, Sépioles (Sepia spp, Sepiola spp)	D	CHY 92 EGY(1) 1.330 TOT 1.422	S M		CF, T, FMF, CA, N, LM, B	C - 450m		NP ? P
Petite praire (Venus gallina)	B	TUR(1) 1.376	M		D, R, CF			NP ?

(1) Estimation FAO

ANNEX III

SUMMARY SHEETS ON NATIONAL FISHERIES LEGISLATION

SUMMARY SHEET

ITALY

I DEFINITION OF MARINE AREAS:

*(A) Fixing of baselines:
* DPR of 26. 4.1977 No 816

*(B) Definition of territorial sea:
* Code de la Navigation, Article 2, as amended by Law No 359 of 14. 8.1974

*(C) Definition of the EEZ:
In Italy there is no EEZ

*(D) Definition of fishing zones:
* DM of 20.11.1984 concerning the fishing reservation in the territorial sea off the coast of Italy

*(E) Demarcation/definition of other zones:

II GENERAL PROVISIONS
* Law No 963 of 14. 7.1965 on sea fishing

* DPR No 1639 of 2.10.1968 implementing Law No 963
* DPR No 651 of 22.10.1978 amending Regulation No 963 as regards fishing gear (Official Gazette No 299, 25.10.1978).

III CONDITIONS GOVERNING FISHING

*(A) Applications/authorizations for the purchase, construction, modernization or alteration of fishing vessels
* Code de la Navigation : Articles 143/145, 146/155, 156//163, 302/309, 310/312, 313/336, 337/341, 342/346.

*(B) Applications for fishing licences
* DM of 20. 7.1989 concerning the ban on the issuing of new fishing licences for the use of drift nets and the ban on the use of these nets for fishing swordfish and albacore tuna during the month of October (OG No 181, 4. 8.1989).
* DM of 5. 5.1986 on the issuing of licences for sea fishing.
* DM No 248 of 7. 5.1987 laying down conditions for the issuing of fishing licences.

*(C) Bans and restrictions on fishing:

* DM of 5. 4.1979 on the establishment of a biological protection zone for monk seals around the island of Montecristo (OG No 112, 23. 4.1979).
* DM of 24. 9.1979 on the establishment of a distant water biological protection zone (OG No 275, 8.10.1979).
* DM of 25. 9.1979 on the establishment of a biological protection zone east of the island of Lampedusa (OG No 275, 8.10.1979).
* DM of 10. 8.1979 on the establishment of a biological protection zone around Portoferroio (island of Elba) (OG No 278, 3.11.1971).
* DM of 25. 8.1972 on the establishment of a biological protection zone in a part of the waters around St Maria di Castellabate (OG No 253, 27. 9.1972).
* DM of 4. 3.1978 on authorizations for trawling in the 3-mile zone in the maritime divisions of Chioggia, Venice, Rimini and Ravenna.
* DM of 14.10.1985 on exceptions to the ban on trawling in the 3-mile off-shore zone.
* DM of 26.10.1985 on fishing for bivalve molluscs using suction pumps (OG No 265, 11.11.1985).
* DM of 16. 7.1986 amending the DM on fishing for bivalve molluscs using suction pumps.
* DM of 12.12.1985 on licences for fishing bivalves in the Adriatic (OG No 303, 27.12.1985).
* DM of 28. 5.1979 on fishing for swordfish (OG No 150, 2. 6.1979).
* DM of 30. 7.1979 laying down rules governing mussel fishing in the Adriatic (OG No 213, 4. 8.1979).
* DM of 31. 7.1979 laying down rules governing dolphin catches (OG No 213, 4. 7.1979).

*(D) Classification and definition of gear types and characteristics:

*(E) Minimum sizes

* DPR No 1639 of 2.10.1968 implementing Law No 963.
* DPR No 651 of 22.10.1978 amending the section of Regulation No 1639 relating to minimum sizes (OG No 299, 25.10.1978).
* DM of 7. 7.1980 on the minimum sizes of tuna, amending Article 87 of the Regulation on sea fishing.

* DM of 3. 8.1982 on the minimum sizes of mullet, sole, whiting and hake (OG No 230, 21. 8.1982).
* DM of 4.11.1982 on the minimum sizes of Norway lobster (OG No 318, 18.11.1982).
* DM of 16. 7.1986 on the minimum sizes of sole and tellin (OG No 173, 23. 7.1986).

*(F) Arrangements for the monitoring and supervision of fishing

*(G) Rules governing the organization of markets

* Law No 388 of 2. 8.1975 on measures to assist producers' organizations
* DM of 23.12.1975 on the recognition of producers' associations
* DM of 4. 6.1976, ditto
* DM of 8. 4.1977, ditto
* DM of 8. 5.1977, ditto
* DM of 27.10.1984, ditto.

SUMMARY SHEET

GREECE

I DEFINITION OF MARINE AREAS:

*(A) Fixing of baselines:

*(B) Definition of territorial sea:

*(C) Definition of the EEZ:

*(D) Definition of fishing zones:

*(E) Demarcation/definition of other zones:

II CONDITIONS GOVERNING FISHING:

*(A) Applications/authorizations for the purchase, construction, modernization or alteration of fishing vessles

*(B) Applications for fishing licences
* DP No 324/1985 concerning fishing licences for fishing vessels equipped with small surroundingnets.
* DP No 526 of 20.12.1988 on fishing for garfish with nets.

*(C) Bans and restrictions on fishing:
- in certain zones
- for certain periods
- for certain species
- for certain types of fishing and/or fishing gear

*(E) Laying down conditions governing the use of fishing gear

58

*(F) Classification and definition of gear types and characteristics:
- mesh size
- size and/or number
- materials
- manufacture.

*(G) Minimum sizes

*(H) Arrangements for the monitoring and supervision of fishing

*(G) Rules governing the organization of markets

COMMENTS:

There is no precise definition in Greek law of fishing vessels. For a vessel to be considered Greek, however, it must fly the Greek flag, carry maritime papers, be at least 51 % owned by Greek natural or legal persons and carry a shipping licence.

Entitlement to fish is dependent on thepossession of a fishing licence issued to ships used for fishing by fishermen who earn their living from fishing.

Access to waters under Greek sovereignty for the purpose of fishing by vessels flying the flag of another state is permitted provided such rights are reciprocal.

SUMMARY SHEET

FRANCE (MEDITERRANEAN ONLY)

I DEFINITION OF MARINE AREAS:

*(A) Fixing of baselines:

*(B) Definition of territorial sea:

*(C) Definition of the EEZ:

*(D) Definition of fishing zones:

*(E) Demarcation/definition of other zones:

II GENERAL PROVISIONS

* Decret No 90-95 of 25. 1.1990 laying down general conditions governing sea fishing in the fishing zones not covered by the Community rules on conservation and management (fishing gear and methods of fishing, authorization of certain types of fishing or fishing procedures, restriction on the number of beneficiaries, restriction on catch volumes, by-catches, special provisions, disciplinary and precautionary measures).

III CONDITIONS GOVERNING FISHING

*(A) Applications/authorizations for the purchase, construction, modernization or alteration of fishing vessels

*(B) Applications for fishing licences

*(C) Bans and restrictions on fishing:

* Arrete of 8. 9.1987 establishing a reservation on the coast of the local adminitrative area of La Ciotat.
* Arrete of 8. 9.1987 establishing a reservation on the coast of the local administrative area of Carry le Rouet.
* Arrete No 1750-2-3 of 19. 6.1980 governing the use of high-opening trawls.
* Arrete No 242 of 29. 6.1981 governing the use of lampara nets in the Mediterranean.
* Arrete No 1248 of 3. 5.1977 governing the use of pelagic trawls.
* Arrete of 25.11.1975, as amended on 29. 3.1976 on trawling in the Mediterranean.

* Arrete of 2. 6.1964 governing the use of towed gear in the Mediterranean, as amended by the :
  - Arrete of 21. 4.1965
  - Arrete of 9.10.1981
  - Arrete of 13. 4.1973
  - Arrete of 20. 6.1979.

*(D) Conditions governing the use of fishing gear

* Arrete No 1750-2-3 of 19. 6.1980 governing the use of high-opening trawls.
* Arrete No 242 of 29. 6.1981 governing the use of lampara nets in the Mediterranean.
* Arrete No 1248 of 3. 5.1977 governing the use of pelagic trawls.
* Arrete of 25.11.1975, as amended on 29. 3.1976, on trawling in the Mediterranean.
* Arrete of 2. 6.1964 governing the use of towed gear in the Mediterranean, as amended by the:
  - Arrete of 21. 4.1965
  - Arrete of 9.10.1981
  - Arrete of 13. 4.1973
  - Arrete of 20. 6.1979.
* Decret of 10. 5.1862 on the use of set nets.
* Decret of 19.11.1959 on the establishment of barriers using set nets;
* Arrete of 15. 5.1973 on the use of trammel nets for sole fishing.
* Arrete No 169 of 21. 7.1965 laying down certain rules governing the use of surrounding nets and purse seines known as "seincholes" in the waters of the seaboard conscription of Marseilles.

*(E) Classification of gear types and characteristics:

*(F) Minimum sizes

* Decret No 89-1018 of 22.12.1989 implementing the Decret of 9. 1.1852, as amended, on determining the minimum catch size of certain fish and other sea animals.
* Arrete of 19.10.1964, as amended by the Arretes of 19. 4.1978, concerning the minimum sizes for fish, anadromous species and crustaceans in the Mediterranean.

*(G) Arrangements for the monitoring and supervision of fishing

*(H) Rules governing the organization of markets

SUMMARY SHEET

SPAIN (MEDITERRANEAN ONLY)

I DEFINITION OF MARINE AREAS:

*(A) Fixing of baselines:
* RD of 25.10.1977, waters under Spanish jurisdiction, baselines straight for demarcation. (BOE No 234 of 30. 9.1977).

*(B) Definition of territorial sea:
* Law No 10/1977 of 4. 1.1977, territorial sea.

*(C) Definition of the EEZ:
* Law No 15/1978 of 20. 2.1987, exclusive economic zone.

*(D) Definition of fishing zones:
* D. No 3209/1973 of 14.12.1973 defining and naming the marine areas, establishing the territorial waters and dividing the coast into maritime provinces and districts.
* RD No 1497/1977 of 3. 5.1977, maritime divisions, modification of maritime zones, provinces and districts.
* Order of 15.10.1981 laying down general conditions for the setting of quotas in fishing grounds and fishing areas.

*(E) Demarcation/definition of other zones
* Order of 4. 4.1983 marking out a marine reservation off the island of Tabarca.

II GENERAL PROVISIONS
* RD No 681/1980 of 28. 3.1980 on the management of national fishing activities.

II CONDITIONS GOVERNING FISHING

*(A) Applications/authorizations for the purchase, construction, modernization and alteration of fishing vessels
* Order of 20/11/1979 determining the maximum power of trawlers in the Mediterranean.
* Resolution of 6. 7.1977 on the laying up arrangements associated with the construction of trawlers in the Mediterranean.

*(B) Applications for fishing licences
* Resolution of 30. 4.1976 laying down rules governing the fishing effort of trawlers in the Mediterranean and the issue of licences.
* Order of 30. 7.1976 on trawling in the Mediterranean.

* Circular No 4/1/2 of 8. 6.1976 containing an additional rule to those laid down in the Order of 30. 7.1975, ditto.
* Order of 24.11.1981 governing fishing activities using set or drift gear in the Mediterranean.

*(C) Bans and restrictions on fishing:

*(D) Classification and definition of gear types and characteristics:

*(E) Minimum sizes

*(F) Arrangements for the monitoring and supervision of fishing

* RD No 2090/84 of 10.10.1984 on types of infringement in fishing for coral.

*(G) Rules governing the organization of markets

* Law No 33/80 of 21. 6.1980 on the establishment of the FROM.
* RD No 883/1981 of 8. 3.1981 establishing the structure of the FROM.
* RD No 337/86 of 10. 2.1986 laying down the procedure for the State recognition of fisheries organizations and associations.

ANNEX IV

DEFINITION OF FISHING EFFORT

The fishing effort is the amount of fishing activity carried our over a defined period in a defined area. It depends on:

(a) the number of boats, their size, tonnage, motive power and technical equipment;
(b) the type and size of gear used, and
(c) the time taken by the boats to find and catch fish.

Explanation of the concepts

Defined region: This may be (1) a region with geographical limits (e.g. the Golfe du Lion, the Adriatic, the Sicilian Channel); (2) a biological unit (e.g. an ecosystem such as a lagoon or an estuary); (3) a fishery (e.g. Castellon sardine fishery, Golfe du Lion anchovy fishery).

Motive power of the boats: In principle the motive power of a boat is expressed in kW. However, it is possible that two boats having officially the same power are of different efficiency because of their structures (technical equipment, downrating-rerating of engine, etc.).

Technical equipment: Use of sophisticated apparatus to detect and catch fish.

Type of gear: Each type of fishing gear has a different efficiency, specific methods of utilization and a different effect on fish populations (e.g. selectivity as to size, age, species).

Size of gear: The size of the gear used determines (1) the yield (e.g. number of hooks); (2) the size of boat used and (3) in certain cases, the target species (e.g. small seine nets for catching sardines, large ones for tuna).

Fishing time: this concept includes the time required to detect and find shoals, fishing time proper and the use of fishing gear (e.g. how long a net remains in the sea to fish, how many times a day the net is cast).

ANNEX V

FINANCIAL ASSESSMENT

FINANCIAL ASSESSMENT (ESTIMATE)

I. Estimated cost of new measures to be implemented in the Mediterranean under the conservation policy (ECU million per year)

MEASURES	MEDITERRANEAN
No 1	0
No 2	0
No 3	2.5
No 4[1]	2
No 5[2]	0
No 6	1
No 7[3]	0.5
TOTAL	6[4]

Measure No 1 Harmonization of national legislation
Measure No 2 Establishment of fisheries jurisdiction areas outside territorial waters
Measure No 3 Coordination of research
Measure No 4 Construction of a model for the management and conservation of resources
Measure No 5 Monitoring of the fishing effort
Measure No 6 Body to manage fisheries activities
Measure No 7 Fishing for sponges, coral and sea urchins

N.E. - Cannot be estimated

1 Likely financial costs of the construction of a model for the management and conservation of resources are included in the costs of measure under research coordination.
2 Excluding expenditure on the consequences of this measure. Expenditure arising from implementation of this measure to monitor the fishing effort is included in existing structural instruments.
3 Expenditure under the Social Fund and ERDF budgets.
4 Additional resources considered necessary to finance the specific measures in the communication.

II. Structural policy already being implemented under Regulation (EEC) No 4028/86

(ECU million per year)

MEASURES	MEDITERRANEAN
MODERNIZATION	7.5
TEMPORARY WITHDRAWAL	3.8
PERMANENT WITHDRAWAL	6.5
TOTAL	17.8[1]

III. SUMMARY

The specific measures proposed for conservation will entail expenditure of not more than ECU 6 million per year.

1 Annual cost of structural measures to be applied in the Mediterranean (on the basis of one year of application of the common fisheries policy in the Mediterranean after it has been run in).
However, this amount does not include expenditure on new building, which will have to be assessed in the light of implementation of the freeze on the fishing effort.