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**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE
EUROPEAN PARLIAMENT**

**laying down a Community Action Plan for the conservation and sustainable
exploitation of fisheries resources in the Mediterranean Sea under the Common
Fisheries Policy**

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1. INTRODUCTION

1.1. The fisheries activity in the Mediterranean Sea

Mediterranean fisheries represent an important and vital sector of the Community fisheries. The Community Mediterranean fleet represents about 22% of the total Community fleet expressed in tonnage and 34% expressed in engine power. In numbers, it represents about 46% of Community fishing vessels. On average, fishing vessels in the Mediterranean are smaller than in the rest of the Community. More than 32,950 vessels, *i.e.* around 80% of the Mediterranean vessels, are smaller than 12m in length, giving the Mediterranean fleet its characteristics of a small scale artisanal fishery, although a large proportion of the catches is taken by larger, non-artisanal vessels. Further details on the Mediterranean fleets of the Member States are given in Annex 1.

The landings in volume in the Mediterranean represent a relatively modest share of about 12 % of total Community landings. However, the economic value of landings is much higher. This situation might be explained by the fact that most of the catches landed in the Mediterranean are used for human consumption, even catches of small sized fish, which generate higher market values.

In 1997 the four Mediterranean Member States generated more than 106,000 jobs, including part time fishermen, or 42% of total EU jobs in the catching sector.¹

Concerns have been expressed about the seeming mismatch between the substantial social and economic importance of Mediterranean fisheries and the attention given to it within the Common Fisheries Policy.

1.2. The Mediterranean specificity

The Mediterranean Sea and the fisheries carried out there are characterised by a number of distinctive features with important implications for the conservation policy under the Common Fisheries Policy. These features include: relative extension of national *vs.* international waters, straddling and shared stocks, overall characteristics of fishing activities, availability of scientific information and a number of other considerations, *e.g.* leisure fisheries. Some of these features are not exclusive to the Mediterranean, but they are more pronounced in this region.

1.2.1. *Relative extension of national vs. international waters*

The continental shelf in the Mediterranean basin is generally narrow and fishing grounds are usually found close to the coasts, within territorial waters. This fact, together with various kinds of political considerations, might explain why Exclusive Economic Zones (EEZ's) so far have not been established in the Mediterranean. Only Fisheries Protection Zones have been declared in some cases (Spain: 49 miles and median line) or fishing exclusive zones as is the case of Malta (25 miles). Therefore, the extension of waters under national jurisdiction in comparison with international waters is more limited than elsewhere in the Community.

¹ Data Source: "Regional socio-economic studies on employment and the level of dependency on fishing" (1999).

1.2.2. *Shared stocks and fisheries*

Because of the limited extent of national waters and the usually short fishing trips, often of only one or two days, there are few areas of overlapping of fishing activities of fleets of Community Member States and among Community and non-EU fleets. Multinational fleets fishing in the same area are the exception rather than the rule.

However, the perception of shared stocks and fisheries has been changing rapidly. This is due both to clearer scientific opinions and to the development of new fisheries extending their operative ranges outside national waters. The number of shared fisheries has increased in several areas like the Alboran Sea, the Gulf of Lions, the Northern Tyrrhenian Sea, the Adriatic Sea, the Ionian Sea, the Aegean Sea, the Sicily Strait and the Gulf of Gabes. In addition to the highly migratory species, who can be found in the whole Mediterranean Basin, a minimum list of shared stocks have been agreed both within the GFCM² framework and FAO sub-regional programmes³. The list might be expanded to include other species and fisheries in the future. However, the number of shared fisheries identified already at this stage justifies common action to be taken for those fisheries both at Community and international levels.

1.2.3. *Overall characteristics of fishing activities*

Most Mediterranean fishing vessels, as previously indicated, are basically artisanal in their nature in terms of scale (more than 80% of the vessels being smaller than 12 m in length) and, consequently, also as regards labour and capital investment. Therefore, many fishing activities are small and carry out different fisheries at different times in coastal waters throughout the year. Moreover, there is a high proportion of semi-professional and part-time fishermen in the Mediterranean and therefore the enterprise structure differs from other Community areas.

In general, both catch rates and total daily amount of catches per vessels are quite low in comparison with fishing activities carried out in areas outside the Mediterranean. However, the economic value of the catches is not exclusively determined by the overall quantity of landings but also by the diversity of catches, where small quantities of very valuable small size and short life-span species can lead to a higher price for the overall catch. Nevertheless, accounting also for changes in fishing power, catch rates of demersal species in fisheries are still generally lower than in the past, although present levels of demersal landings are achieved through a high fishing effort exerted by generally overcapitalized fleets.

Technological interactions, *i.e.* different fishing gears catching the same species, are quite frequent and might involve small-scale artisan fisheries (fishing for fry of sardine/anchovy, hake spawners, red mullet, common pandora, seabass, gilt-head seabream, blackspot seabream, other sparids, sole, skates-rays, mackerel, horse mackerel, scad, cuttlefish, other cephalopods, shrimps, tunas, etc.), bottom trawlers and other towed gears (fishing for hake, red mullet, pandora, seabass, gilt-head seabream, blackspot seabream, other sparids, sole, skates-rays, mackerel, horse mackerel, scad, sardine, anchovy, cuttlefish, other cephalopods, shrimps) and pelagic

² General Fisheries Commission for the Mediterranean
³ COPEMED, ADRIAMED and MEDSUDMED

trawlers and seiners (fishing for sardine/anchovy, cephalopods, mackerel, horse mackerel, scad, sea-bass and seabreams, tunas etc.).

There are numerous small landing sites, spread along thousands kilometres of coastline, very often without a market place, which makes control and enforcement difficult.

The fact that fishing grounds usually are quite close to the coast where the highest biodiversity of bottom fish is located, results in a high degree of competition for space among fishermen, as well as strong interaction of fishing activities with coastal benthic environments which, in turn, represent essential fish habitats.

1.2.4. Availability of scientific information

A large proportion of the fishing grounds remains within national waters. This has encouraged the view that management measures can be achieved separately and has reduced the geographical perspective within which national administrations have considered management issues.

This fact, together with a certain orientation of scientific community to prefer more marine ecology and biology research, has led to a discontinuity between the scientific work carried out and management actions. The level of application of research recommendations in fisheries management has been generally low and approaches to management, such as effort limitation regimes, have generally not been based on scientific advice.

Moreover, despite the fact that there is a lot of scientific research and knowledge on fisheries and resources in the Mediterranean, there is no overarching scientific forum, comparable to the role played by ICES⁴ in other Community waters, to promote and co-ordinate scientific activities and findings, to scrutinise scientific advice as well as to present it in a suitable format as a basis for fisheries management. With the establishment of the GFCM Scientific Advisory Committee (SAC) in 1999 this weakness is being addressed. There is, however, still much to be done and the Community will support the SAC in its endeavours.

1.2.5. Competition with other uses

Perhaps more than in other Community areas, there is a very high pressure from tourism on Mediterranean coastal areas and thereby competition between various activities in those areas.

The coastal nature of some fisheries targeting shared stocks, as well as the seasonal movements of some highly migratory species into littoral waters, lead to interactions and competition between professional and leisure fishermen. The latter sometimes have a significant influence on the use of resources, in the order of more than 10 % of the total fisheries production. Therefore, due account should also be taken of sport and part-time fisheries especially when catching shared stocks or when competing with commercial fisheries submitted to more stringent management rules.

⁴ International Council for the Exploration of the Sea

1.3. State of the resources

Most of Mediterranean fishery resources, be they demersal, small pelagic or highly migratory species, have long been considered overexploited.

In regard to highly migratory species, the Eastern bluefin tuna stock has been assessed in the past by the ICCAT⁵, which has indicated heavy over-exploitation. Although the thoroughness of these evaluations is arguable, due to considerable uncertainties resulting from the lack of key data, there is little doubt that the stock is overexploited. The level of bluefin tuna being caught and put in cages in the Mediterranean area for rearing purposes and, often, outside a framework of regulated and reported catches, also rises serious questions. This fishing activity is believed to increase the pressure on the stocks⁶. Similar considerations on over-exploitation apply to swordfish in the Mediterranean where there is evidence of an exploitation pattern, which results in large quantities of juveniles and recruits of the year, present in the catches. Major efforts in data collection are required to get a clear picture of the status of the key stocks, although indications based on current data paint an extremely negative picture.

Catch statistics on demersal and small pelagics species show a negative trend in the 1990's for the most important species or groups of species (see figures in **Annex 2**). Daily catch rates per vessel have fallen dramatically when compared to catch rates of some decades ago, despite the fact that the power and efficiency of fishing vessels has increased in recent times. Also the catch quality, both in terms of species and size composition, have been changing over time. Long life-span species and bigger size specimens have practically disappeared from demersal catches in several areas and fisheries.

The current evaluations of demersal, small and large pelagic fisheries, carried out within the GFCM and ICCAT frameworks, confirm this picture of overexploitation of several resources and highlights the need to reduce the mortality on juveniles and to reduce the overall current fishing effort by about 15-30% for those fisheries catching some overexploited stocks.

Despite the recognised over-exploitation of several resources, there are few scientifically reported cases of stocks at risk of collapse. Anchovy in the Northern Spanish coast, black spot seabream in the Alboran Sea and hake in the Gulf of Lions are among those, however. This long-term resilience of Mediterranean fisheries, without so far detected dramatic collapses of target resources, except for anchovy in the mid-1980's, is usually explained by the fact that some proportion of the adult stocks have most probably remained consistently unavailable to small mesh trawling. This feature of the Mediterranean fisheries, as determined by fishing practices, gear and vessel characteristics and by the presence of several untrawlable bottoms, has led to the creation of spatial/temporal enclaves within the normal range of distribution of several species which allow a proportion of the stock to survive to maturity, thus preventing the collapse of the population.

⁵ International Commission for the Conservation of Atlantic Tunas

⁶ Cf. Report of the sixth GFCM-ICCAT meeting on stocks of large pelagic fishes in the Mediterranean, section 5 p.13, on potential management effects of bluefin tuna fattening: "General increase in fishing effort of PS and, in near future, probable increase towards small to medium size bluefin tuna".

However, the situation has changed rapidly in the last decade, with the increasing efficiency of fishing methods, both in terms of vessel engine power and the size of fishing gears, greater use of improved electronic positioning systems and, above all, the development of fixed gear fisheries targeting spawners of several long-lived species in so far untrawlable areas. Furthermore, widespread illegal trawl fisheries in coastal areas have reduced the "refuge" effect, resulting from the poor enforcement of the current regulation limiting the use of the towed gears at depth greater than 50 metres or at distance from the coast greater than 3 miles if depth is less than 50metres.

This shows the need for management measures to bring exploitation to a sustainable level and to avoid stocks being pushed outside safe biological limits.

Current levels of fishing effort and the use of small mesh size towed gears, together with the utilisation of a variety of fishing gears exploiting all the life spans of a resource, are incompatible with sustainable and profitable fisheries.

1.4. Environmental aspects

In the Mediterranean, fishing grounds are usually found quite close to the coast where the highest biodiversity is located and there is an increasing awareness and concern about fishing impact both on habitats and non-commercial resources.

Apart from legal obligations concerning environmental protection, there is a clear interest for a responsible fishing industry to ensure not only the conservation of the target species but also of species belonging to the same ecosystem or associated with or dependent upon the target species. This approach is basic to preserve the biodiversity and integrity of marine ecosystems and, hence, the production features of the essential fish habitats with positive effects also for fishery resources and fishing activities.

The main environmental threats posed by fisheries in the Mediterranean can be divided into two major groups: damages to biodiversity and damages to habitats.

To the first group belongs the widespread use of small mesh size fishing gears as well as excessive fishing of commercial species. As for other Community fisheries, it is believed that if fishing on commercial species were reduced to sustainable levels, this will have beneficial effect on the environment. In any case, sustainability of commercial fish stocks does not imply necessarily sustainability of biodiversity in the broad sense, and hence environmentally oriented measures will always be required. Nowadays many non-target species are under threat, such as sea mammals, birds and reptiles. If in some cases the main threats come from non-fishing activities, such as the reduction of nesting sites of sea turtles and birds, fishing may increase the danger for these populations.

The widespread use of dredges and bottom trawl gears, often rigged with chains or other rock-hopper devices, have been identified as the main causes both of the decline of shallow meadows of marine phanerogames and deterioration of benthic communities in rocky areas.

High-impact techniques such as the St. Andrews' cross for red coral (*Corallium rubrum*) extraction or the exploitation of European date mussel (*Lithophaga*

lithophaga) and common piddock (*Pholas dactylus*) by destroying the rocks inhabited by these bivalves have long been forbidden, but there are indications that the prohibition is not well enforced. Furthermore, there are warning signals that the illegal use of explosive and poisonings is still taking place.

At regional/international level, several processes in the field of environmental protection in relation to fishing are worth mentioning briefly. On the one hand, the GFCM includes environmental protection among its general objectives and there has been established a sub-committee to the Scientific Advisory Committee of the GFCM to deal with environmental matters. Similarly ICCAT dedicates increasing efforts to include environmental protection in its management recommendations. On the other hand, multilateral environmental agreements such as the Barcelona Convention and the Bern Convention also have implications for the environmental protection in the Mediterranean from the field of fishing .

1.5. The CFP applied in the Mediterranean

Within the Common Fisheries Policy (CFP), the structure and market policies have been applied and enforced in the Mediterranean in an equivalent manner to other Community areas. This is also the case for control policy, although the implementation of some aspects of the control policy has been delayed in the Mediterranean. However, the conservation policy has traditionally been carried out differently than in other areas. For example, in the Mediterranean basin the CFP's main conservation instrument, the total allowable catches (TACs) and quota system, was not applied. Only since 1998 has a fish stock been subject to such a system in the Mediterranean: bluefin tuna. In addition, certain elements of the CFP, such as the logbook, have been introduced in the Mediterranean later than in the Atlantic.

This is largely a result of the Mediterranean specificity referred to above, but in some cases this specificity may have become an excuse to fail to apply measures that are just as important and necessary as in other parts of the Community. It is clear that the commitment of the Community to regulate fisheries in the Mediterranean is no less than for other fisheries. The regulation of Mediterranean fisheries should be upgraded to the same degree of development and priority as other Community areas, albeit with certain specific instruments where necessary.

2. OBJECTIVES

The objectives of the Common Fisheries Policy are the same in the Mediterranean as in other Community waters, namely, to ensure the exploitation of living aquatic resources that provides sustainable environmental, economic and social conditions.

In addition to the general objectives of the future Common Fisheries Policy however, there are a number of specific objectives for a sustainable management of Mediterranean fisheries.

2.1. Community leadership

The Community must continue to take the lead in implementing an effective conservation and management system for Mediterranean fisheries. The Community should continue to promote fisheries management within GFCM, while at the same time acting at Community level without waiting for decisions within GFCM when

that is found necessary. Community leadership in this area does not mean working in isolation. There is a need to co-operate with non EU Countries, but this will require technical assistance and financial resources from the Community to non-EU countries bordering the Mediterranean, notably through existing Community and Member State bilateral and regional co-operation programmes.

2.2. Management at the appropriate level

The relative weight and importance of coastal fisheries is much higher in the Mediterranean than anywhere else in the Community's maritime façade. It is necessary to re-evaluate the level at which the different activities must be dealt with: local/national or Community/ international level. Coastal fishing activities might be better managed at local or national level, due to the proximity to the problems and the capacity for local authorities to act more quickly together with local fishermen's organisations. However, if fishermen organizations do not actually embrace responsible fisheries, such proximity might enhance the risk that the highest priority of biologically sustainable fisheries could be abandoned in favour of socio-economic considerations. Community intervention will be necessary and opportune when and where fisheries have a transnational dimension, either for conservation, environmental or market reasons, this is the case in the Atlantic. There is a need for the Community to define clearly which are these fisheries and to concentrate Community measures on these. However, concerning the management of coastal resources, the Community, while allowing Member State management, must set common standards on conservation and environmental protection.

It is to be noted that the number of identified fisheries exploiting straddling or shared stocks is increasing, due both to changing fishing patterns and greater knowledge of fishing activities (cf. **Annex 3**), while there continues to be numerous small-scale coastal fishing activities.

Three categories of fisheries, with a different degree of Community involvement, can be distinguished:

1. *Fisheries targeting highly migratory fish.* These must be managed at Community level notably in the framework of the relevant regional fisheries organisations, namely the International Commission for the Conservation of the Atlantic Tunas (ICCAT) and the General Fisheries Commission for the Mediterranean (GFCM); the Community will actively promote multilateral management of these stocks, including as necessary catch limitations, technical measures and effort limitations (see Annex 3).

2. *Fisheries targeting shared demersal and small pelagic stocks or operating in shared areas* (e.g. Alboran Sea, Valencian coast, Gulf of Lions, Ligurian Sea, Thyrrenian Sea, Corsica and Sardinia Seas, Adriatic Sea, Ionian Sea, Aegean Sea, Strait of Sicily etc.) where two or more Countries are involved. These should be subject to a Community/international regulatory framework, including effort limitation, technical measures and, where necessary, catch limitations. This could be agreed at GFCM level and possibly applied at sub-regional level on the basis of the Scientific Advisory Committee (SAC) recommendations. SAC has so far identified only 10 stocks within this category and recommended its subsidiary bodies to identify more shared stocks. Other shared stocks and fisheries can be included, thanks also to the work done within the FAO sub-regional programmes. Scientific

information may not yet allow to precisely identify shared stocks in some areas, however ancillary information and geographic contiguity could suggest likely shared stocks. A more extensive list is shown in Annex 3.

3. *Fisheries targeting stocks primarily distributed in national waters and caught only by one Member State.* These should continue to be managed at national level, provided that there are no significant by-catches of fish stocks in category 1 or 2 above.

2.3. Integration of environmental considerations into fisheries management

The general Community commitment to integrating environmental concerns into Community policies, as stipulated into Article 6 of the Treaty establishing the European Community, requires the Community to take adequate actions to protect habitats and species from negative effects of fisheries.

The integration of environmental concerns into the CFP and the means to achieve it are described in Communication COM(2002)186 setting out an Action Plan to integrate environmental protection requirements into the CFP. This action plan is intended to apply to all Community fisheries, including those of the Mediterranean.

As far as the by-catch of protected species is concerned, special care should be taken of the few remaining populations of monk seals. Protection of turtles and seabirds from longlining may in some cases be of special concern. Cetacean by-catch will be of less importance following the recent ban of driftnets, although action at the international level would be beneficial to extend the protection to all Mediterranean fisheries. However, the interaction between cetaceans and fishing activities, beyond the by-catch phenomenon, is a problem of growing concern that deserves careful consideration.

As far as damage to habitats is concerned, there is a special need to protect sea-grass beds (Phanerogams such as *Posidonia* sp., *Zoostera* spp. and *Cymodocea* sp.), ham mussel beds, deep water white corals and hard bottom biocenosis in coastal areas, irrespective of depth, from the effects of trawling, dredging and similar activities. The impact of dredges fishing for bivalves must also be kept under control, since it may reduce the capacity of soft bottoms to maintain diversity of benthos.

The other side of the coin concerns the impact of environment hazards on fishing. Although these cannot be controlled by the Common Fisheries Policy, they constitute a problem and solutions must be sought. One of the most striking problems is the periodic, although not fully predictable appearance of blooms of mucilaginous algae that stick to fishing gear and make it non-operational. This phenomenon, which might be related to eutrophication due to excessive nitrate and phosphorus supply, can cause important losses to the fishing industry. It would be legitimate that the Commission, in co-operation with Member States, investigate the causes and establish, the adequate liability and compensation schemes.

Good liaison between the competent authorities in environmental protection and fisheries matters is necessary, both within national and Community administrations, in order to take efficient and synergetic action in these two fields. The Commission is at present designing a comprehensive strategy for the protection of the marine environment that will guide this co-ordination.

2.4. Building on experience

In the Mediterranean there are several valuable management measures in place, particularly in the management of fishing effort, either agreed by fishermen's organisations or enforced through regional or national measures. Examples regarding the control of fishing days and/or hours out of the port are well known. Limitation of daily landings per vessel is another example of measure agreed at local level. Some of these schemes are widely accepted by the fishermen. The Community will build on these experiences for the future, notably through the consultation process in the future Regional Advisory Committees.

2.5. A commitment to enforcement

Enforcement is far from perfect in all Community fishing areas. In the Mediterranean, like everywhere else, it is necessary that the future CFP will include a commitment to improve control and enforcement.

To ensure this commitment, the full involvement of fishermen's organisations and other stakeholders is essential. For this reason, improved participation of fishermen in the development of this policy is of particular relevance to assure better comprehension and improved compliance with management measures.

2.6. Integrated use of various management measures

The complexity of the Mediterranean fisheries, in terms of species richness and diversity of fishing gears and practices, together with its economic structure, enables fishermen to be flexible, adapt quickly and to counteract undesired effects of external factors, including management measures.

Therefore a global and coherent management approach is needed which will make use of the various available tools in an integrated way. Some measures can be used jointly for mutual reinforcement and to allow for more flexibility in the fishing system.

In this system of integrated regulatory measures, there should be a certain degree of overlapping of measures having the same purpose. If the primary management system, *e.g.* effort control, fails for one reason or another, there should be a second level of management working as a safety mechanism. This second level may be catch limitation or certain technical measures such as closed areas/seasons, or the interplay of other technical measures and characteristics of fishing method and/or gear that prevent full exploitation of the different demographic components of a stock.

2.7. A recognition of the social importance of fishing activities

The average age of the fishing vessels in the Mediterranean fishing industry is quite old, varying between 23 (Greece) and 29 years (Spain). This makes working, living, health and safety conditions on board far from optimal. Moreover, it makes the fleet less adapted to properly handle the catches, waste management and problems of noise and oil pollution.

There is also growing concern that fishing activities, which have represented traditional working opportunities in fisheries dependent areas, are not attracting young generations anymore. This lack of recruitment, in addition to loss of jobs for

more aged fishermen, in areas with few or no alternative options will create social problems. This trend will also affect negatively the transmission of cultural heritage related with fishing activities.

The Commission considers that these trends can only be reversed by a transition towards sustainable fishing, in which not only fisheries resources will be better maintained, but fishing enterprises will be more profitable and economically viable.

The roadmap on the reform of the Common Fisheries Policy (COM(2002) 181 final) indicates measures to address the social implications of the application of the reform in the Mediterranean.

2.8. The international dimension: multilateralism and co-operation

The extent of international waters in the Mediterranean makes it inevitable and essential to address fisheries management also through international co-operation, at least in the field of fisheries for highly migratory stocks. This task is more difficult in the Mediterranean than in other Community waters, as there are a number of non-EU countries bordering the Mediterranean with few means and/or little tradition of fisheries management; multilateral fisheries management has little or no tradition. Future progress by the Community in terms of fisheries management may therefore be hampered by different approaches being taken by other countries of the region. Consequently, the development of a multilateral dimension to fisheries management in this region will require an important element of co-operation, aimed at making it easier for non-EU countries to devote more attention to fisheries management.

This is clearly an area where the principle of Community leadership is of particular relevance. Such co-operation will require technical assistance and financial resources from the Community to non-EU countries and should benefit as much as possible from existing Community and Member State aid schemes.

Furthermore, initiatives need to be taken to foster and facilitate co-operation among Community and non-EU fishing industry both in the capture and aquaculture sectors.

3. REQUIRED ACTIONS AT COMMUNITY LEVEL

On the basis of the guiding principles and objectives outlined in the previous sections, the Commission considers that a number of actions at Community level should be taken in order to achieve the objectives of the Common Fisheries Policy in the Mediterranean Sea. In this Action Plan, the following specific fields of actions are foreseen at Community level and described below:

- establishing a concerted approach over the jurisdiction of maritime waters,
- reducing overall fishing pressure,
- applying catch limitations where possible,
- improving the current exploitation pattern and reducing negative effects on stocks and the environment,
- improving control and enforcement,

- strengthening scientific structures and improving scientific knowledge,
- greater stakeholders' involvement in the consultation process.

Finally, the links to other aspects of CFP than conservation policy are also briefly commented upon.

3.1. A concerted approach to the jurisdiction of waters

At present, the situation as regards declarations of EEZs or Fisheries Protection Zones (FPZs) in the Mediterranean is very inconsistent. One Member State (Spain) has declared a Fishery Protection Zone of 49 miles, a candidate country for accession (Malta) has declared, since 1971, a 25-miles Exclusive Fishing Zone. France and Italy have declared 12-miles territorial waters and Greece 6-miles territorial waters.

The declaration of FPZs, of up to 200 miles from baselines, could be an important contribution to improving fisheries management, given that about 95% of Community catches are taken within 50 miles of the coast in the Mediterranean. These FPZs would certainly facilitate control and contribute significantly to fighting against illegal, unreported and unregulated (IUU) fishing. However, such a declaration of FPZs would be much more effective if carried out through concertation among all the countries involved. A common approach to FPZs among Community Member States and, subsequently, among all the countries in the region would therefore be desirable.

It is to be borne in mind that FPZs, unlike EEZs, refer exclusively to the jurisdiction over fishery resources. Other questions of jurisdiction (mineral resources, navigation rights, etc.) remain unaffected by the establishment of FPZs. With the declaration of a FPZ, it is possible to set up a wide range of measures which restrict the free access of fishing vessels from third countries or simply to establish these zones for the purpose of controlling foreign vessels.

A possible concerted declaration of FPZs would have advantages and disadvantages. Among the advantages are:

- the ability to apply fisheries management measures over a much wider area
- a substantial improvement of control and enforcement;
- the exclusion or, at least, the control of certain fleets (from the Far East) currently fishing in the Mediterranean's international waters;
- easier restriction of IUU fishing.

Among the inconveniences are:

- the risk of loss of access to certain fishing grounds for Community vessels, if non-EU countries were to follow the Community example, such as Croatia and Tunisia (this difficulty could, however, be overcome through the establishment of bilateral fisheries agreements);
- significant political difficulties in certain areas;

- difficulties to establish median lines in the narrower Mediterranean areas.

The Commission considers that an initiative in this field should consist of inviting Member States to debate at Community level the desirability of a common approach to this matter and whether any establishment of FPZs should include the limitation of access for third parties, or simply have as the main purpose an adequate control of fishing activities. Such a debate would also be extended to the negotiating candidate Countries concerned.

If this debate results in a clear Community position on the issue, the next step should be to convene a conference among coastal states of the Mediterranean in view of exploring a common Mediterranean-wide approach in this matter.

3.2. Managing fishing effort

From what has been said earlier on the state of the resources, there is a widely recognised need to reduce fishing mortality significantly.

The high diversity of catches of many fisheries, the technological interactions and the dispersion of landing sites generally make single species approaches and output measures, such as current TACs and quota management systems, often inappropriate for Mediterranean fisheries. The only exceptions are the highly migratory species and, perhaps, some small pelagic stocks and some crustaceans (cf. section 4.3. below).

Measures designed to reduce and control the fishing effort, either on a permanent or temporary basis, must be one of the basic tools for the management of Mediterranean fisheries. There seems little choice in most cases but to introduce and/or extend some kind of limited entry, associated with an adequate licensing and fishing permits scheme, with reduction in fleet size and time fished. Major fisheries that will be affected by these measures are those catching shared or straddling stocks. A provisional, non-exhaustive list of those fisheries is given in **Annex 4**.

It should be pointed out that the work currently underway at GFCM, largely as result of Community initiative, is concentrating on identifying fishing effort on the different Mediterranean stocks. It is understood within GFCM that the application of the TAC approach would be largely inoperable in fisheries for mixed species.

Fishing effort management should as far as possible take into consideration proposals, recommendations and advice at GFCM level and considering Mediterranean geographical sub-areas as currently defined by the Scientific Advisory Committee of GFCM. In that regard, the GFCM approach to fisheries management through the identification of management areas and operational units, goes in the direction advocated in this section.

Fishing effort management must build upon experience already made at local or national level, with the enforcement of simple rules such as the maximum allowable annual fishing days, the short week, a fishing ban during national holidays and the fixing of a maximum allowable daily time out of port or, in case of longer than daily fishing trips, limitations of daily fishing hours. The recently introduced vessel monitoring system (VMS), and its extension to fishing vessels smaller than 24m overall length, will assist in properly enforcing fishing effort management.

Fishing effort will be decided to match the sustainable exploitation of the groups of stocks concerned. To this end, in addition to gross tonnage and engine power, it may be necessary in some fisheries to define other effort criteria, such as overall length and fishing gear. Member States will be given flexibility in implementing these effort limits (limitation of days at sea, number of vessels, maximum overall dimension of fishing vessels, etc.). To this end, it is fundamental to know who is catching what, where, and by which method. Therefore a more close matching among fishing activity, fleet segmentation, vessels characteristics, navigation certificate, fishing licence and fishing permits is needed.

In some cases, fishing effort limitation schemes at Community level must take into account gear dimension insofar as it has an impact on fishing effort.

3.3. Catch limitations

Notwithstanding catch limitations already set up in some regions, mainly for economic and market price control purposes, it has already been mentioned that some features of the Mediterranean fisheries might make management by catch restrictions and quotas less effective in this area. However, although the most important management instrument to be introduced in the Mediterranean is the management of effort at Community level, the application of Total Allowable Catches (TACs) may still be an appropriate instrument in some cases. In addition to bluefin tuna, the only Mediterranean stock currently subject to TAC and quota management, certain other stocks will be made subject to TACs and quotas as soon as scientific advice becomes available:

- Mediterranean swordfish is an obvious candidate for future TACs and quotas, to be agreed in ICCAT and GFCM.
- Other highly migratory fish, such as albacore, some small tunas, and even dolphinfish (*Coryphaena* spp.) could in the mid term be regulated by way of TACs and quotas, in the appropriate multilateral bodies. In the case of highly migratory fish, the emphasis should be placed in working with existing multilateral fishery organisations.
- Certain stocks of small pelagics (sardine, anchovy) as well as certain stocks of crustaceans such as Norway lobster and red shrimps might also be subject to a TAC and quota system, as these stocks are fished in clearly targeted fisheries where they dominate the catch composition.

In this context, it is also worth noting the international commitments and responsibility of the European Community with regards the enforcement of, and compliance with, international TACs. Recreational fisheries targeting stocks under a quota system should also be submitted to quotas, control and a reporting system and, in a more general manner, be subject to limitations of the same order as those applying to commercial fisheries.

3.4. Improvement of fishing methods for conservation purposes

3.4.1. Revision of current technical measures for fisheries of Community interest

Beyond limitations in fishing intensity, based on effort or catch restrictions, there is a need to address the way fishing is conducted in order to contribute to the objectives of the Common Fisheries Policy in the Mediterranean.

Regulation 1626/94 has been an important first step to harmonise technical measures among Member States in the Mediterranean. This regulation, however, has become outdated and should therefore be overhauled on the basis of the principles and objectives established in this document.

In accordance with the principle specified in section 2.2, technical measures applied to purely coastal fisheries, not catching shared or straddling stocks, will fall under Member States responsibility; in these cases the Community will only establish standards on conservation of stocks and the environment. These standards could take the form of provisions establishing the objectives to achieve and fishing behaviours to be avoided. Member States must follow these standards in their national management of these fisheries.

Technical measures for fisheries with a transnational dimension will be regulated and harmonised at Community level. Those fisheries are to be identified using the following criteria:

1. Conservation considerations: Technical conservation measures regarding the fisheries managed at Community level, that is, those fisheries for which effort limitations and/or TACs are deemed to be appropriate, according to the principles defined in sections 4.2 and 4.3.
2. Environmental considerations: Technical measures to address transnational environmental concerns, such as by-catches of non-target migratory or wide-ranging species, as well as the protection of essential fish habitats in coastal areas and offshore outcrops.
3. Market considerations: Minimum landing sizes, applicable to the most important species. These landing sizes must be applicable regardless of whether their respective fisheries are managed at Community or national level in order not to distort the single market for fisheries products.

The main fields of action, with regard to technical measures, foreseen by the Commission at this stage are given below, following the criteria mentioned above.

1. The main aim of technical conservation measures will be to improve the exploitation pattern of commercial species as much as possible, in order to have a higher selectivity and fewer juveniles in the catch. To this end, several measures will be necessary:

- For bottom trawlers and other towed gears, a general revision of technical conditions to improve selectivity, while taking into account the diversity of species caught. Given the mixed fishery and the small size of some Mediterranean species even when fully grown, it is clear that any general increase in mesh size from 40 mm would lead to substantial economical losses, at least in the short term, and is

therefore difficult to achieve. Therefore, particular attention should be given to improve gear design (windows, selection/separator panels, hanging ratio between cod-end and lengthening piece, etc.), and mesh shapes and, furthermore, to review devices that may be attached to the towed gears;

- Gear specifications, such as hanging ratios and minimum mesh sizes, for trammel and gill-nets, hook sizes for longliners and possibly other measures for other gears. Measures concerning the numbers and overall dimensions of these gears will also be necessary, in connection with the management of effort referred to in section 4.2 above;

- The development, as much as possible, of closed areas/seasons to protect high concentrations of juveniles or spawners.

2. On technical measures with environmental purposes, the new regulation will include measures to implement the ideas specified in section 4.4.3 below, including measures to reduce by-catches of non-target species and the possible establishment of sanctuaries to protect essential fish habitats (closed areas to fishing).

3. On minimum landing sizes, a general revision should be carried out on the basis of the following considerations:

- The need to take into account, as much as possible, of the selectivity of the gear legally used to catch the species in question;

- For species occurring both in the Mediterranean and the Atlantic, harmonisation of minimum landing sizes as far as possible. However, in some cases the different biology of the species can justify different minimum landing sizes. It is therefore important to ensure through adequate labelling that the catch area of the products can be unambiguously identified.

On fisheries to be managed by Member States, the new technical measures regulation should include minimum requirements for Member States to ensure the sustainability of the resources in question, the conservation of essential benthic communities as well as to ensure full respect of Community legislation on environmental protection. Member States should report periodically to the Commission on the measures taken at national level and the results achieved by their management.

The large number of recreational fishermen, as well as the type and dimension of fishing gears used, justify the wish to include this sector within fisheries management, both for reasons of conservation and fair application of management rules.

The current derogations in Regulation 1626/94 will be reviewed by the Commission in the light of the principle specified in section 2.2. Following this evaluation, the Commission will propose which of the derogations should be prolonged at Community level and which derogations can be left to be decided at national level. The bans on certain gears and fishing practice, such as beach seines, should be considered an “*acquis*” and be maintained unless otherwise suggested by more recent scientific evidence. However, the possibility of retaining certain types of gears, insofar as these gears are used to catch fish other than shared or straddling stocks in

coastal fisheries, will be left to Member States to regulate, under the general conditions stated above.

3.4.2. *Discards*

There is a significant problem of discards, due to both the low selectivity of small mesh size trawl gears and to mismatching between legal mesh size and minimum landing size. According to estimates computed in recent years about 50% of discarded biomass consists of edible species with commercial value. Furthermore, on average more than 60% of all caught species, both commercial and not commercial ones, are regularly discarded. Estimates computed in the Aegean and Greek Ionian Seas pointed out that bottom trawl discards range between 39 and 49% of total catch. On average the total discarded quantities from bottom trawl range from 13000 to 22000 tons annually, that is about 12% of the total landings.

Therefore, the problem of discards needs to be thoroughly analysed on the basis of updated scientific evidence also in the Mediterranean. Possible solutions to the problem will be addressed in the Commission's Action Plan on discards.

3.4.3. *Environmental aspects*

The Community Strategy to integrate environmental protection requirements into the CFP and the Action Plan on biodiversity are both as important in the Mediterranean as in any other area of Community waters. However, this dimension may be particularly relevant in coastal areas of the Mediterranean, highly populated and already subject to very high rates of utilisation: tourism, aquaculture, coastal fisheries, sport fishing, industry, etc.

The need for integrated coastal zone management is therefore of particular relevance. And, although the principle specified in section 2.2 would generally exclude direct Community intervention in these matters, there should be high Community-wide environmental quality standards. The fact that fisheries not only has impacts on the environment but also is affected upon by other human activities such as sand extraction and pollution, particularly in coastal areas, contributes to the need for this approach.

Particular attention will be devoted to mitigate possible incidental catches of protected species and to implement Community Action Plans for elasmobranch and birds as requested by the FAO International Plan of Actions.

Furthermore, special attention should also be given to control, to gear characteristics and, perhaps, the banning of trawl gears operating on hard bottom fishing grounds (*e.g.* inshore rocky areas, offshore rocky outcrops, deep sea white coral, etc.) irrespective of depths and distance from the coast.

Fishing vessels may, directly or indirectly, contribute to the pollution of the marine environment through domestic wastes discarded at sea, fuel and oil refilling operations and, finally, re-suspension of pollutants contained in sea bed littoral sediments. Actions should be identified to allow the fishing industry to fulfil its obligations to respect air and water quality standards and, foremost, to avoid mechanical disturbance of sediments enhancing the release of entrapped contaminants.

3.5. Control and enforcement

The control of fishing in the Mediterranean entails a deep knowledge of local fisheries and a high level of co-operation between fishermen at local, national and international levels.

The landing sites are numerous, dispersed along a very long coastline and on several islands, and catches are for the most part marketed by direct sale, i.e. not passing through a market.

Despite this, the control of Community fishing activities in the Mediterranean Sea has to be based on principles and measures similar to those retained for other fishing areas, but adapted to local circumstances. They should also always be adaptable to the development of the fisheries and management rules.

Generally, the Community has to define the objectives of control as well as the guidelines for their attainment, with the Member States having the responsibility of implementing them according to local circumstances. The common provisions have to include the point of first sale, and to be equally applicable to similar imported products.

More specific control programmes can, however, be defined for individual fisheries.

The use of the VMS system for the monitoring of fishing effort proves to be suitable for certain fleets and fisheries; its extension to vessels of more than 10 metres overall length, as already proposed by the Commission in the context of CFP reform, is also relevant to the Mediterranean. Furthermore a revision of the current logbook system is needed.

To improve control and enforcement, a better matching between vessel characteristics, fishing licences and fishing permits is needed; in particular fishing vessels lacking adequate rigging and equipment to haul a certain gear should not have on the fishing licence the authorisation to use that specific gear. In certain fisheries the single net rule might prove to be useful.

Particular attention should be given to set up a control and reporting framework for recreational fisheries either targeting shared and straddling stocks or competing with commercial fisheries which are submitted to strict technical rules.

At the international level, even in the event of an extension of fisheries jurisdiction, the Community should seek to

- strengthen the role of the GFCM, in order to promote a harmonisation of control rules of fishing activities within a multilateral framework. It is a short to medium term objective for the Community to develop a commonly agreed control scheme at GFCM level applicable to highly migratory fish,
- develop regional co-operation for resources shared with certain non-EU countries (in the Adriatic sea, Aegean sea, Strait of Sicily and Alboran Sea),
- fight against IUU fishing .

3.6. Improvement of scientific knowledge

Action to maintain and further develop high standard fishery science is essential to support rational decision-making procedures. Although improvement of scientific advice is subject to a separate Communication from the Commission, there are some aspects in the specific context of the Mediterranean worth highlighting.

Several EC- and nationally-funded research projects carried out in the Mediterranean during the last twelve years have permitted an enormous increase of scientific knowledge both of fisheries and resources. In addition, these research activities have fostered collaboration among different research institutions, enlarging the geographical scope of the research and, first and foremost, the creation of a scientific network among Mediterranean scientists.

The new Community framework of data collection, laid down in Council Regulation (EC) No 1543/2000, will allow for substantial improvements of the availability of scientific data about fishery resources and Community Mediterranean fisheries. Hopefully, this will have positive effects on the entire process of delivering fishery scientific advice. In 2004, after two full years of application, the data collection Regulation could be revised in order to make it more adapted to the needs of the Mediterranean scientific community and fisheries.

However, scientific and technical literature on fisheries and stock status still remains widely dispersed. Furthermore, it is often in a format not yet suitable to provide advice for enforceable fishery management actions at Community level.

For the fishery-related problems that are predominantly of Community relevance, the Scientific, Technical and Economic Committee for Fisheries of the Commission (STECF) might play an important role to fill this gap and to provide relevant scientific advice. To this end a specific STECF subgroup, namely SGMED, has been already set up. The organisation of the STECF needs to be strengthened, both in terms of dedicated human resources and financial and technical support. This issue is addressed in a separate Commission Communication on the improvement of scientific advice for fisheries management.

Scientific research must be assisted to set up an adequate monitoring system, both through direct and indirect survey methods. Moreover, it should be stimulated to set up a suitable precautionary framework, providing both target and limit reference points, and identification of appropriate harvesting rules also on a multi-annual basis.

3.7. Transparency and stakeholders involvement

The setting up of a Regional Advisory Council for the Mediterranean, as envisaged in the new framework Regulation, should be an important tool to improve the involvement of stakeholders in fisheries policy development for this area. However, still more is needed in the Mediterranean.

In the Mediterranean there is no tradition of international fisheries management. Introducing a fully-fledged conservation policy will require also the active involvement and participation of stakeholders, particularly fishermen themselves, in the consultation process. Even though there are important professional organisations in the Member States concerned, there is less participation of fishermen in

international fora. However, as indicated by the “building on experience” principle (cf. section 2.4. above), there is much to be gained by improving stakeholders involvement in this region.

At international level, the establishment of a Mediterranean-wide fishermen’s association could provide the necessary boost to enhanced co-operation and awareness about management issues. Bringing fishermen together at international level should foster a similar process at national level that will benefit those non-EU countries where fishermen are not yet organised, thereby contributing to the development of responsible fisheries throughout the Mediterranean. The Commission proposes to organise a Conference to that effect in the course of 2003.

3.8. Relationship with other policies under the CFP

The Action Plan for the Mediterranean will also have a bearing on other policies within the CFP:

- ***Structural policy.*** Implementing an effort management system will have obvious implications for the fisheries sector whose short term economic impacts the FIFG could help mitigate. Simultaneously, support from the FIFG must contribute to adapt fishing effort and capacity levels to the biological potential of the groups of stocks concerned. Furthermore, structural policy should also support the development of concentrating the first sale market structure, i.e. reducing the effects of dispersion of landing sites, in order to improve marketing. This might channel and concentrate the local production at the most appropriate geographical scale, with fishermen benefiting from a greater control of and closeness to market price formation mechanisms. At the same time it would be extremely useful for other management purposes, most notably data collection and a better control of landings.
- ***Markets.*** The minimum landing sizes should take into account the need to ensure, as much as possible, similar conditions for different areas of the Community. Otherwise, lower minimum landing sizes in some areas may undermine conservation efforts in other Community areas.
- ***Certain aquaculture-type activities,*** such as tuna fattening, are new form of exploitation of the wild bluefin tuna stock. This issue should therefore be treated largely as a fisheries management question. The practice, developed very quickly over the last few years in several Mediterranean countries (both Community Member States and non EU Countries) is not under control at present, and has raised a number of problems, identified by a joint ICCAT/GFCM working group. The Community should promote, notably in the framework of international organisations, a number of measures to ensure that this practice be developed in a way that does not increase the fishing pressure on the wild stock, particularly on juveniles, and that does not degrade the marine environment. In this respect, measures to improve control and statistical data collection will be necessary, and the limitation of the amount and the size of tuna used for fattening also seem opportune.

Social consequences of the application of the reform in the Mediterranean will be counteracted by adequate measures as indicated in the roadmap on the reform of the Common Fisheries Policy (COM(2002) 181 final).

4. REQUIRED ACTIONS AT INTERNATIONAL LEVEL

4.1. Co-operation within multilateral fisheries organisations

The two regional fisheries organisations in the Mediterranean (ICCAT and GFCM) have different degrees of development and activity. ICCAT plays and should maintain an essential role in the management of highly migratory species in the region. EC is committed to this organisation at both management and scientific level, and it has been to the forefront in pressing the on-going work within that organisation for the establishment of a control and enforcement scheme.

GFCM, which is the most appropriate forum for the management of demersal and small pelagic fisheries in the Mediterranean, has made considerable strides in recent years, essentially due to initiatives which have been taken by the Commission and Member States. Such improvement, however, would not have been possible without the willingness and active contribution of several Mediterranean scientists.

On its accession to the organisation in 1997, the Community started an exercise to re-invigorate the operation of GFCM by introducing changes in the Convention to permit a more modern working environment and establish an operational, rather than a consultative, organisation.

During these recent years, its Scientific Advisory Committee (SAC) has constantly expanded its work, and after an initial period of organisation, it produced at the last GFCM Plenary Session a number of management recommendations on specific stocks (anchovy, hake, red mullet, red shrimps,).

A further important development, resulting from the joint work of SAC's subsidiary bodies and FAO regional programmes, has been the provisional definition of geographical areas in Mediterranean with the aim to move towards a common definition of management areas. In addition, SAC has, so far, identified 13 shared stocks in Mediterranean for purpose of common management and additional shared stocks have been proposed within the framework of the FAO regional programmes (cf. Annex 3).

The Community should actively support the implementation, proposed by SAC and endorsed by GFCM Plenary Session in September 2001, of the MedFISIS project whose goal is to build a regional fishery statistics and information system that would allow the creation of a common fisheries statistics database to be managed by the GFCM Secretariat. The main impediment now within GFCM is at the financial level in that the autonomous budget, has still not been ratified by the necessary number of Parties. It is on this issue that the Commission should continue its efforts to achieve speedy implementation.

Once the autonomous budget is in place, the GFCM will have its necessary independence, and it is then the appropriate timing for a political initiative to boost effective multilateral co-operation. The international conferences of Crete in 1994 and Venice in 1996 set the scenario to launch the reinforcement of the co-operation in fisheries management in the region, and notably contributed to the parallel exercise to strengthen GFCM through a revised Convention.

Another Multilateral Conference with the adoption of a further General Declaration, whilst of general political interest, would add little to the management process in the Mediterranean. For these reasons, a Multilateral Conference at Ministers' level with a well targeted agenda should be organised. Such a conference should be launched under the auspices of GFCM with an agenda devoted to two issues:

- (a) the control and enforcement and the fight against IUU activities, and
- (b) the improvement of the scientific basis for management, with emphasis on helping non-EU Parties to participate more actively on scientific advice and management .

As regards scientific research in general, most of the findings of the research projects in recent years have proved to be useful to support scientific work within the scientific bodies of the Regional Fisheries Organisations (RFOs) and of the FAO sub-regional projects⁷. However, initiatives still need to be taken by the Community to support the scientific work carried out within the Mediterranean RFOs and to strengthen their role to stimulate scientific and technical activities among their Parties. The dispersal of scientific information together with the absence of a unique scientific forum where Mediterranean issues could be properly addressed, has so far weakened the scientific advice provided by the Mediterranean scientific community and has made it less operational for management purposes.

4.2. Harmonisation of measures in the Mediterranean Basin

Although the Community should take the initiative on fisheries management regardless of whether other countries of the region follow, it is obvious that there is an interest in ensuring harmonisation of the management measures applied in the region. The Community should pursue the discussion and adoption of Mediterranean-wide management measures, particularly within GFCM, to ensure as much consistency as possible between the Community initiative and the management carried out by other countries of the Mediterranean basin.

4.3. Co-operation among States and among industries.

The Mediterranean basin is characterised by a high number of coastal States with little tradition and means to ensure fisheries management. A multilateral fisheries policy in this region should have an active co-operation policy as a fundamental element. This co-operation should be focused, most notably, on enhancing coastal States' capability to carry out their international obligations. Data collection, basic research and monitoring and control of fishing activities are some of the possible actions to be favoured in this context.

The current experience of co-operation at sub-regional level is very encouraging. Participants have improved their respective co-ordination with full exchange of information and participation among the three projects. The Community could take the initiative to promote a similar action in the Eastern Mediterranean, to complete the coverage of sub-regional actions, which constitute the best basis on which the GFCM Scientific Committee can build its work.

⁷ ADRIAMED, COPEMED, MEDSUDMED

These actions are temporary, so the main problem will be to insure their continuity in time and to encourage a very strict co-ordination between these projects and the GFCM Scientific Committee which should inherit their results notably in terms of research co-ordination, data collection and data bases.

Therefore the Community should promote the development of a Mediterranean-wide co-operation programme, using existing financial frameworks as much as possible. The programme should address the need for permanent data collection, for scientific research and for capacity building in formulating scientific advice in fishery. Such a programme should build upon existing sub-regional projects, but should ensure Mediterranean wide coverage and permanence.

Furthermore, initiatives need to be taken to foster and facilitate co-operation among Community and non-EU fishing industries both in the capture and aquaculture sectors.

5. ACTION PLAN: ACTIONS AND TIMETABLE

Actions taken in the context of this Action Plan should include the widest possible consultation with stakeholders, the scientific community and national administrations at the earliest stages of the process. This orientation should allow exchange of opinions, debate and final agreement within the framework of ACFA, Advisory Committee for Fisheries and Aquaculture, the STECF and the Council.

The Action Plan is presented as relevant priority initiatives for the next 3 years.

Section	Actions		Observations	Timing
3.1	A concerted approach to the jurisdiction of waters	Debate among the Member States involved	<i>ad hoc</i> meetings	2003
		Multilateral initiative	Conference of Ministers	2003
3.2	Reduction of overall fishing pressure: fishing effort regime and fleet policy	Legislation addressing the general framework for the management of Community fishing capacity	New Regulation for Community fleet policy	By the end of 2002
		Legislation addressing fishing effort regime in the Mediterranean	New Regulation setting up annual fishing days ceiling, hours out of the port etc.	By the end of 2003
		Specific provisions within the revision of technical measures regulation to reduce the fishing effort (see 3.4)	Dimension of fishing gears; maximum number of fishing gears by vessels, closed season,	By the first half of 2003
3.3	Catch limitations	New TACs and quotas		When scientific advice is available
3.4	Improve fishing methods for conservation purposes	Revision of technical measures: Council Regulation No 1626/94	Mesh sizes, mesh shape, rigging of gears, selection devices, minimum landing sizes, closed areas and seasons, authorised fishing gears, maximum dimensions of fishing gears	By the first half of 2003
		New set of technical measures specifically addressing discard reduction in Community waters	- Communication on discards - Amendments to existing legislation	- Third quarter of 2002 - Starting in 2003
		Actions to be taken within the framework of integration of environmental protection requirements into the CFP	- Communication with an Action Plan on integration of environmental protection requirements into the Common Fisheries Policy	- Second quarter of 2002
		Review of derogations expiring by the end of 2002		By the end of 2002
4.5	Improving control and enforcement	New specific legislation addressing control issues at Community level		By the end of 2002
		Control of fishing activities on the high seas and fishing activities by non-Mediterranean flag States	<i>Ad-hoc</i> conference involving all States whose fleets operate in the Mediterranean	2003
		Programme devising specific control campaigns for the Mediterranean		2002
		Proposing the preparation of an international control system in GFCM		2004

4.6	Improvement of scientific knowledge	Collection of biological, effort, economic and research survey data	Revision of Commission Regulation implementing Council Regulation 1543/2000	End of 2003
		Improvement of STECF organisation	- Communication on scientific advice - Revision of Commission Decision which set up the STECF, by including also financial provision	- Third quarter of 2002 - First quarter of 2003
		Improvement of scientific base for management within GFCM	Multilateral conference	2003
4.7	Transparency and stakeholders involvement	Legal basis within the new framework legislation of CFP to establish Community Regional Advisory Committees	New basic Regulation	2002
		Support initiatives for the establishment of supranational coordination entity among Mediterranean fishermen Associations	Representatives of this supranational fishermen's association might attend as observers to the meeting of RFOs	2002 and 2003
		Conference of Mediterranean fishermen's associations		2003
		Regional workshops		2002 and until RAC for Mediterranean is in place
5.1-5.3	Strengthening of multilateral co-operation	Reinforcement and support to the Regional Fisheries Organizations, including scientific work		Permanent
		Multilateral Conference within GFCM	- Control and enforcement - Scientific advice	2003
		Support to the current FAO sub-regional projects	- COPEMED, ADRIAMED, MEDSUDMED - launch of initiatives for a possible programme in the Eastern-levantine basin	- 2003-2007 - 2004-2005
		Continuation of FAO subregional projects	Follow up to ensure the continuity of the projects	As from where current projects end

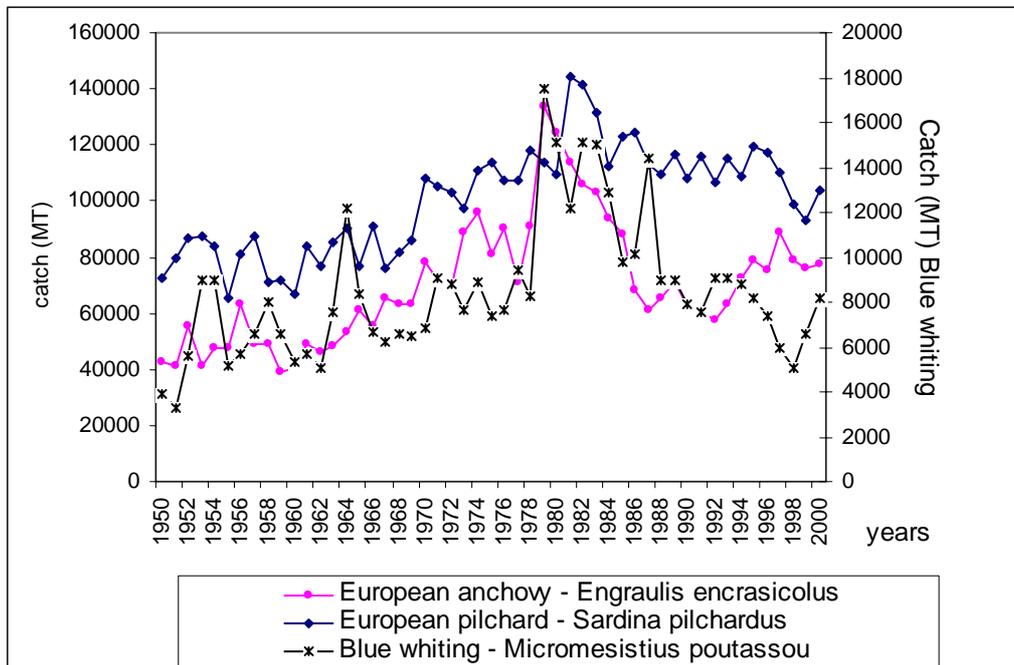
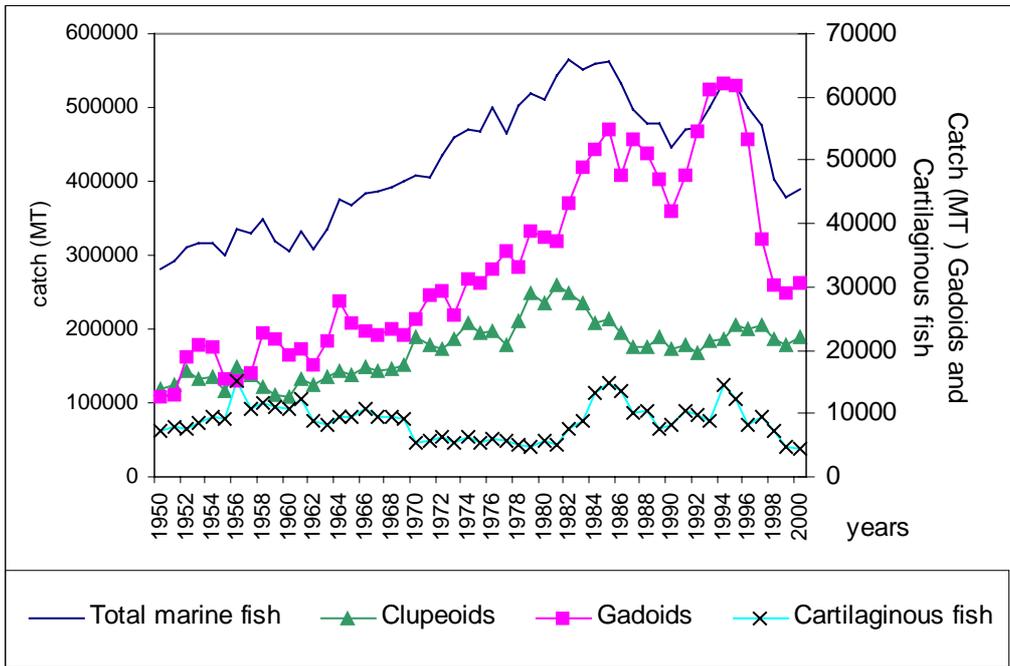
ANNEX 1
Details on the Member States' Mediterranean fleets

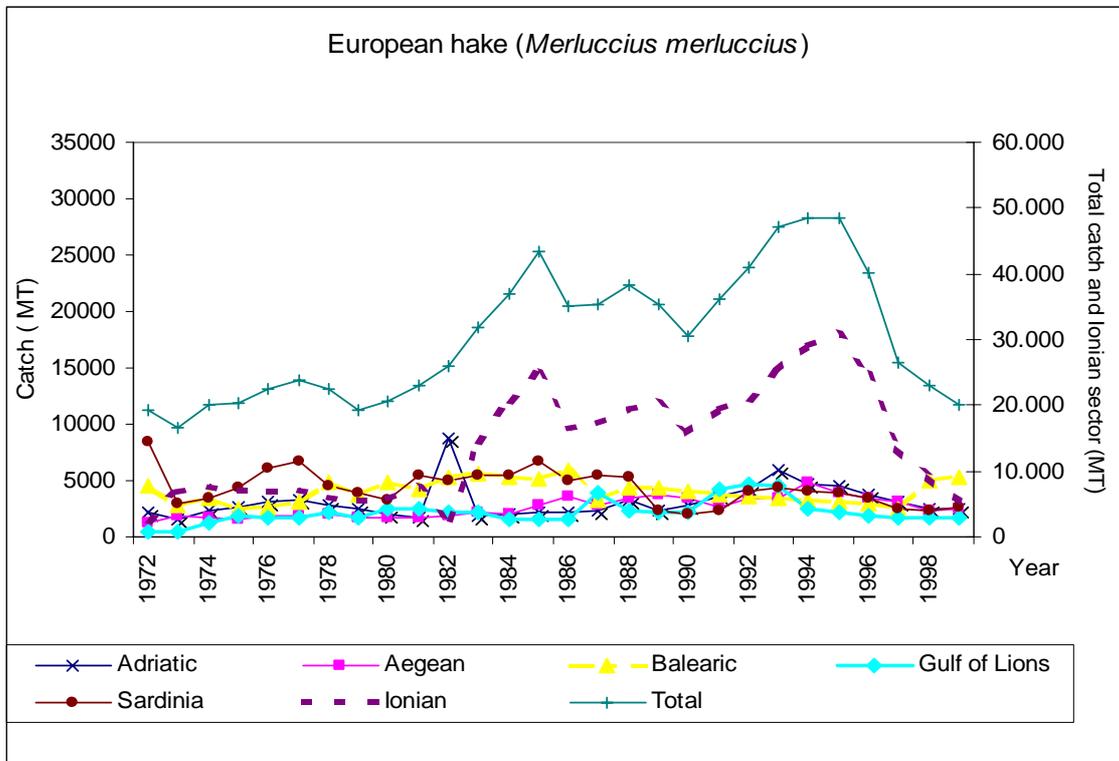
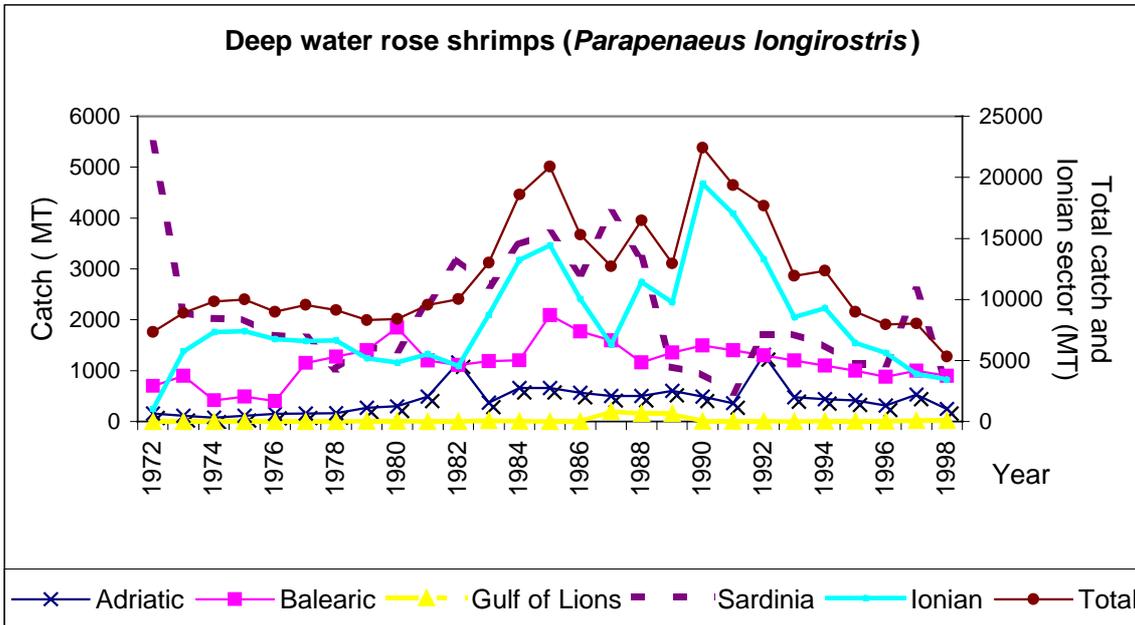
M.S.	Number of vessels	Share of EC fleet (Number of vessels)	Share of EC fleet (capacity)	Number of vessels smaller than 12m in length	Share of national Mediterranean fleet consisting of vessels smaller than 12m in length
GR	20,157	22.1%	GT/GRT: 5.5% kW: 8.5%	18,837	93.5%
I	16,384	17.9%	GT/GRT: 11% kW: 17.8%	11,412	69.7%
F	1,658	1.8%	GT/GRT: 1.0% kW: 2.1%	1,442	87%
E	4,155	4.5%	GT/GRT: 4.9% kW: 5.1%	2,251	54.2%
Total	42,354			33,954	80.2%

(source: EC fleet register, July 2002)

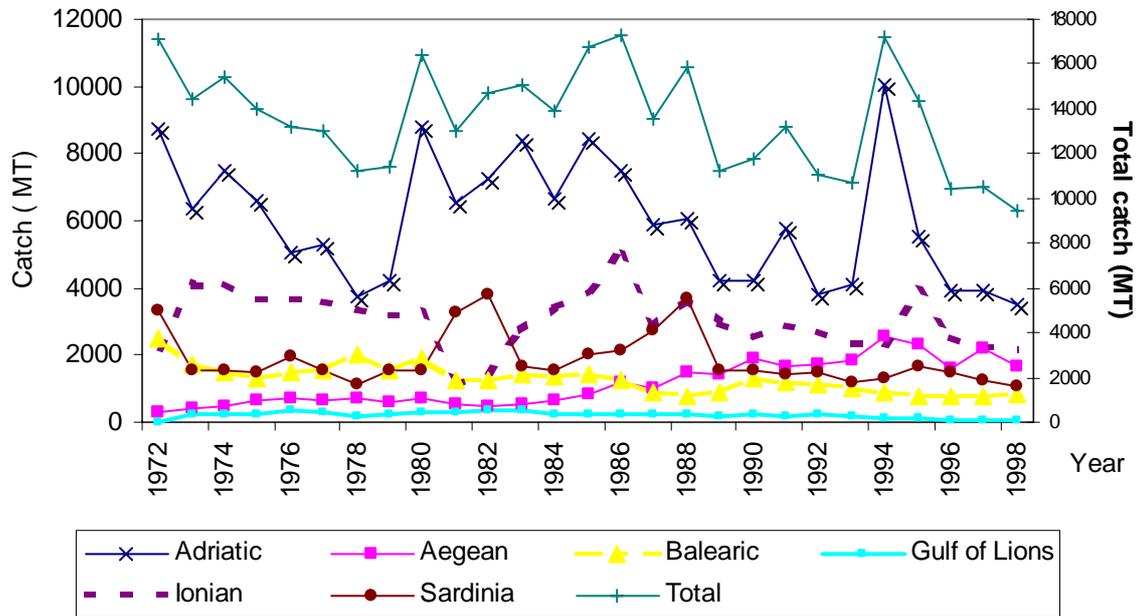
ANNEX II

Production trends by some major species, species group and FAO statistic divisions





Common cuttlefish (*Sepia officinalis*)



ANNEX III Some shared stocks and fisheries

The table has been constructed taking into consideration deliberations of RFOs, FAO subregional programmes as well as other source of information.

Common name	Scientific name	Areas	Some interested Countries	Fisheries	Some associated species*
Albacore	<i>Thunnus alalunga</i>	All Mediterranean	Several countries	Purse seine, drift longliners,	swordfish and other highly migratory species
Anchovy	<i>Engraulis encrasicolus</i>	Adriatic	Albania, Croatia, Fed. Rep. Yugoslavia, Italy, Slovenia,	Purse seine, Pelagic trawl, boat seine, bottom trawl	Sardine, sprat, horse mackerel, Mediterranean scad, mackerel, blue whiting, Broad-tail short fin squid, Common squid,
		Gulf of Lions	Spain, France		
		Aegean Sea	Greece, Turkey		
Blackspot seabrem	<i>Pagellus bogaraveo</i>	Alboran Sea	Spain, Morocco	Bottom trawlers, fixed gears	Blue-mouth rosefish
Bluefin tuna	<i>Thunnus thynnus</i>	All Mediterranean	Several countries	Purse seine, drift longliners	other highly migratory species
Blue whiting	<i>Micromesistous poutassou</i>	Adriatic	Albania, Croatia, Italy, Fed. Rep. Yugoslavia,	Bottom trawlers, purse seines	European hake, greater forkbeard, anglerfishes, John Dory, mackerel, Mediterranean poor cod, conger, horse mackerel, blue mouth rosefish, whiting, small spotted dog-fish, deepwater rose shrimp, Norway lobster, broad-tail short fin squid, curled octopus
Common pandora	<i>Pagellus erythrinus</i>	Tyrrhenian, Corsican and Sardinian seas	France Italy	Bottom trawlers, fixed gears	European hake, red mullet, Tub gurnard, curled octopus, musky octopus, cuttlefish, spot-tail mantis shrimps
		Adriatic	Albania, Croatia, Italy, Fed Rep. Yugoslavia, Slovenia		

Common name	Scientific name	Area	Some interested Countries	Fisheries	Some associated species
Common spiny lobster	<i>Palinurus elephas</i>	Tyrrhenian, Corsican and Sardinian seas	France Italy	Fixed gears, pots	conger, skates and rays, commomn octopus, sparids, wreckfish, groupers, Tub gurnard
Deepwater rose shrimp	<i>Parapenaeus longirostris</i>	Adriatic	Albania, Croatia, Fed. Rep. Yugoslavia, Italy,	Bottom trawlers	European hake, anglerfishes, mackerel, Mediterranean poor cod, blue whiting, horse mackerel, John Dory, Tub gurnard
		Strait of Sicily	Italy, Libya Malta, Tunisia,		
Dolphinfish	<i>Coryphaena spp.</i>	All Mediterranean	Several countries	FAD's and purse seine	other highly migratory species, wreckfish
Eel	<i>Anguilla anguilla</i>	All Mediterranean	Several countries	traps, pots, fixed gears	
European hake	<i>Merluccius merluccius</i>	Adriatic	Albania, Croatia, Fed. Rep. Yugoslavia, Italy	Bottom trawlers, fixed gears, longliners	red mullet, flounder, anglerfishes, John Dory, mackerel, Mediterranean poor cod, blue whiting, greater forkbeard horse mackerel, whiting, conger, scabbardfish, small spotted dog-fish, deepwater rose shrimp, Norway lobster, broad-tail short fin squid, common squid, common pandora, cuttlefish, common octopus, blue mouth rosefish, musky octopus, curled octopus, wreckfish, Tub gurnard
		Aegean Sea	Greece, Turkey		
		Gulf of Lions	Spain, France		
		Strait of Sicily	Italy, Libya, Malta, Tunisia,		
		Tyrrhenian, Corsican and Sardinian seas	France, Italy		

Common name	Scientific name	Area	Some interested Countries	Fisheries	Some associated species
Flounder	<i>Platichthys flesus italicus</i>	Adriatic	Croatia, Italy, Slovenia,	Bottom trawlers, "rapido" dredges	other flatfishes and benthic organisms, red mullet, hake
Great scallop	<i>Pecten jacobeus</i>	Adriatic	Croatia, Italy, Slovenia,	Dredges, Bottom trawlers	flounder and other flatfishes
Large pelagic elasmobranchs	<i>Isurus oxyrinchus, Lamna nasus, Prionace glauca</i> , etc.	All Mediterranean	Several Countries	Longliners, lines, fixed gears, purse seine	other highly migratory species
Norway lobster	<i>Nephrops norvegicus</i>	Adriatic	Albania, Croatia, Italy, Fed. Rep. Yugoslavia,	Bottom trawlers	European hake, greater forkbeard, anglerfishes, John Dory, small spotted dog-fish, conger, blue whiting deepwater rose shrimp, broad-tail short fin squid, blue mouth rosefish, wreckfish
		Strait of Sicily	Italy, Libya, Malta, Tunisia		
		Tyrrhenian, Corsican and Sardinian seas	France, Italy		
Red mullet	<i>Mullus barbatus</i>	Adriatic	Albania, Croatia, Fed. Rep. Yugoslavia, Italy, Slovenia,	Bottom trawlers, fixed gears	common sole, common pandora, seabreams, seabass, mackerel, flounder, Mediterranean scad, spurdog, anglerfish, smooth-hound, cuttlefish, musky octopus, curled octopus, common squid, common octopus, spot-tail mantis shrimps, Tub gurnard
Red mullets	<i>Mullus barbatus</i> <i>Mullus surmuletus</i>	Tyrrhenian, Corsican and Sardinian seas	France, Italy	Bottom trawlers, fixed gears	common sole, common pandora, seabreams, seabass, mackerel, Mediterranean scad, spurdog, anglerfish, smooth-hound, cuttlefish, musky octopus, curled octopus, common squid, common octopus, Tub gurnard

Common name	Scientific name	Area	Some interested Countries	Fisheries	Some associated species
Red shrimps	<i>Aristeus antennatus</i> <i>Aristeomorpha foliacea</i>	Alboran Sea	Morocco, Spain	Bottom trawlers, pots	hake, anglerfish, conger, greater forkbeard, black-mouthed dogfish, scabbardfish, cephalopods, Norway lobster, blue mouth rosefish, wreckfish
		Ionian Sea	Greece, Italy, non EU countries		
		Strait of Sicily	Italy, Libya, Malta, Spain, Tunisia,		
		Tyrrhenian, Corsican and Sardinian seas	France, Italy, Spain		
Sardine	<i>Sardina pilchardus</i>	Adriatic	Albania, Croatia, Fed. Rep. Yugoslavia, Italy, Slovenia,	Pelagic trawl, purse seine, boat seine, bottom trawl	Anchovy, sprat, horse mackerel, Mediterranean scad, mackerel, blue whiting, Broad-tail short fin squid, Common squid
		Gulf of Lions	Spain, France		
		Aegean Sea	Greece, Turkey		
Sparids	Several species	Tyrrhenian, Corsican and Sardinian seas	France Italy	Bottom trawlers, other towed gears, Fixed gears, longliners	Scorpionfishes, seabass, picarels, common octopus, wreckfish, groupers, Tub gurnard, common spiny lobster
Sprat	<i>Sprattus sprattus</i>	Adriatic	Croatia, Italy, Slovenia	Pelagic trawl, bottom trawl	Anchovy, Sardine, horse mackerel, Mediterranean scad, mackerel, Broad-tail short fin squid, Common squid
Sturgeons	<i>Acipenser</i> spp. <i>Huso huso</i>	Adriatic, Ionian and Aegean seas	Albania, Croatia, Fed. Rep. Yugoslavia, Greece, Italy, Slovenia, Turkey,	Bottom trawlers, fixed gears, longliners	

Common name	Scientific name	Area	Some interested Countries	Fisheries	Some associated species
Swordfish	<i>Xiphias gladius</i>	All Mediterranean	Several countries	Drift longliners	other highly migratory species

* Species are not listed in order of importance and not all species are present in all of the listed areas.

ANNEX IV

Provisional and non-exhaustive list of fisheries that might be affected by measures controlling fishing effort

1. Otter bottom trawlers targeting a mixed of species
2. Otter bottom trawlers targeting deep water crustaceans
3. Towed gears targeting selective species (Aphia minuta, fries of Sardine, etc.)
4. High opening bottom trawl and pelagic trawlers targeting demersal and benthopelagic species
5. Pelagic trawlers targeting small pelagic species
6. Purse seines targeting small pelagic species
7. Purse seiners targeting highly migratory species
8. Gillnet and longline fisheries targeting hake
9. Longline and entangling fixed gears fisheries targeting blackspot seabream and/or other hermaphroditic species
10. Longline fisheries targeting highly migratory species
11. Dredges for scallops
12. Fixed gears targeting other shared stocks