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THE USE OF LARGE DRIFTNETS UNDER THE COMMON FISHERIES POLICY

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THE USE OF LARGE DRIFTNETS UNDER THE COMMON FISHERIES POLICY

1. INTRODUCTION

At the Council meeting of Fisheries Ministers on 20 and 21 December 1993 the Commission decided not to present a proposal for a Council regulation extending the term of validity of the derogation granted to 37 French vessels permitting them to continue fishing with driftnets up to 5 km long. The derogation expired therefore on 31 December 1993.

At that meeting the Presidency made a declaration inviting the Commission to:

"draft a report and if appropriate a proposal, not later than 15 February 1994, on the action to be taken on the derogation provided for in Regulation No 3094/86 (Article 9a), basing itself on the conditions laid down by the Council Decision of October 1991, which require scientific proof of the absence of any ecological risk."

The Commission accepted the invitation and has prepared this report on the fishing operations referred to in Article 9a of Regulation (EEC) No 3094/86¹, and in particular on fishing for highly migratory species.

2. THE INTERNATIONAL SITUATION

In 1990 the General Assembly of the United Nations took a position on large-scale driftnet fishing when it presented Resolution 44/225 of 15 March 1990. This was followed by two further Resolutions (45/147 of March 1991 and 46/215 of February 1992) seeking a moratorium and recommending a substantial reduction of driftnetting in the short term. Recommendations for preventing the expansion of driftnetting were made too by a number of international fisheries organizations, notably the International Commission for the Conservation of Atlantic Tunas (ICCAT) which drew up a resolution on preventing the expansion of deep-sea fishing with large driftnets in the Atlantic. In the same vein the Wellington Convention of November 1990 bans the use of nets more than 2.5 km long in the South Pacific. The question of gill nets was discussed also at the International conference on responsible fishing (Cancun Declaration, May 1992) and as item 21 of the agenda for the UN Conference on the environment and development (UNCED) held in Rio de Janeiro in 1992. Simultaneously with the debate world wide and in Europe a campaign has been conducted in the media based on the interest now shown by the public in environmental matters, especially in anything that relates to marine mammals.

¹ OJ No L 288, 11.10.1986, p. 1.

3. DEVELOPMENTS IN THE COMMUNITY

Large driftnets, according to the report produced by the STCF at its meeting in October 1990², means nets more than 1 km in length.

At the Council meeting of Fisheries Ministers in December 1991, the Commission proposed limiting the length of driftnets used by all Community vessels to 2.5 km, in accordance with the Resolutions adopted by the General Assembly of the UN. Parliament endorsed the Commission proposal.

After lengthy discussion in the Council a compromise was reached allowing a certain category of vessels to continue using driftnets of up to 5 km, provided special conditions were met and for a limited period only (see Annex I). Eligibility for such exemption was restricted to vessels that had fished for long finned albacore tuna in the northeast Atlantic during the two years immediately preceding the adoption of the 2.5 km limit alone were eligible. The only vessels to seek and obtain the benefit of the clause were a number of French vessels. The derogation was to expire on 31 December 1993, unless the Council, acting by a qualified majority on a proposal from the Commission, decided to extend it in the light of scientific evidence showing the absence of any ecological risk linked thereto. Furthermore, any position adopted will have to take into account the international obligations of member States in the UN framework and the efforts of the Union to win recognition as an entity concerned with conservation and responsible fisheries management.

4. OVERVIEW

Driftnet fishing as a rule is targeted at species which are pelagic in behaviour and more often than not highly migratory. Of these the species mentioned in this report are salmon, tunas (albacore), billfishes (noordfish).

The report deals chiefly with the type of fishing referred to in Article 9a of Regulation (EEC) No 3094/86, in particular deep water fisheries targeted mainly at highly migratory species.

4.1 The Baltic Sea

Driftnet fishing in the Baltic is concentrated primarily on salmon and sea trout. Rules governing fishing operations are the responsibility of the International Baltic Sea Fishery Commission. In the Community, Council Regulation (EEC) No 1866/86³ lays down the technical measures applicable to Community vessels operating in the Baltic Sea. In the case of driftnet fishing for salmon and sea trout this Regulation imposes a number of restrictions, specifically a ban on the use of more than 600 nets by a vessel at any one time and a limit of 35 m on the length of the nets.

² SEC(90)2498, STCF special meeting of November 1990 held in Charlottenlund

³ OJ No L 162, 18.6.1986, p. 1.

Article 9a(4) of Regulation (EEC) No 3094/86 provides that the technical measures governing driftnets do not apply to the Baltic Sea, the Belts or the Sound.

4.2 Northeast Atlantic

4.2.1 Regulatory aspects

Deep-sea driftnet fishing is targeted at albacore over a large area covering the high seas and the exclusive economic zones of several Member States. Salmon too is targeted by the inshore fisheries of Ireland and the United Kingdom.

Article 9a of Regulation (EEC) No 3094/86 applies in full and bans the keeping on board or the use for fishing of one or more driftnets of an individual or combined length of more than 2.5 km.

According to the Act of Accession of Spain and Portugal and the Council Regulations laying down certain conservation and management measures in the context of the accession of Spain and Portugal adopted by the Council at its most recent meeting in December 1993 (not yet published in the Official Journal), gill nets, including driftnets, may not be used either by:

- vessels of the Member States other than Spain and Portugal in the latter's waters;
- Spanish or Portuguese vessels in the waters of the other Member States;
- Portuguese vessels in Spanish waters, or
- Spanish vessels in Portuguese waters.

4.2.2 Background to the albacore fishery

Fishing for albacore by Community fleets, whichever technique they employ, is determined firstly by the annual migration of this highly migratory species. In the northeast Atlantic albacore is found around June in the latitude of the Azores. In due course migration proceeds in a wide channel towards the northeast bringing the fishery to the Bay of Biscay from August onwards. The fishery continues here, moving gradually northwards until October-November. Depending on environmental conditions this migratory pattern may show annual variations in terms of location and time. Very broadly speaking it confines the fishery to an area beyond the continental shelf, albacore being an oceanic species.

Fishing for albacore by the Community fleets (of France, Spain and Portugal) has traditionally been carried on using two traditional gears, the troll and live bait (see figures 2 and 3 for illustration).

The use of trolls⁴ for catching albacore was developed in the Bay of Biscay early in the century, coincidentally with the decline of the sardine fishery. In 1947 pole-and-line fishing, of tuna shoals lured by live bait⁵ (small sardine, horse mackerel and anchovy) tossed from

⁴ Generally called troll or line fishing.

⁵ A technique known as pole-and-line or live-bait fishing.

vessels, first appeared in the French albacore fishery and was subsequently adopted by the Spanish, followed by the Portuguese in the Azores and Madeira. The latter fleet, like the Canary Islands fleet, still prefers to fish for tropical tuna (skipjack and big eye tuna).

The albacore fishery in the two Member States most directly affected has developed in different ways. Production in France, which stood at 14 300 tonnes in 1966, and was taken by 460 longliners and 86 pole-and-line vessels, had fallen to 1 830 tonnes in 1987, taken by 39 longliners and 15 pole-and-line vessels. Catches more recently have fallen further still, particularly those of longliners. The Spanish longline fleet stabilized at around 500 vessels in 1989 and the number of pole-and-line vessels has remained stable since the start of the Eighties (down from approximately 250 vessels in 1980 to 220 in 1989).

In 1986 French researcher workers conducted trials using driftnets to fish for albacore adapting a technique that had been applied in the Pacific (see figure 1 for illustration). Catches were very satisfactory when compared with those taken using traditional gears.

More recently French fishermen have begun also to fish for albacore using midwater trawls. This method has not, however, been consistently successful.

4.2.3 The recent development of albacore driftnetting in the northeast Atlantic

The use of this technique developed rapidly in France, spreading to two other Member States, Ireland and the United Kingdom. The fleet, which numbered 20 French vessels in 1988 (the year in which commercial driftnetting began), has expanded to approximately 90 vessels for the three Member States in the 1993 fishing year. The rise in the number of vessels is reflected in an increase in fishing effort (expressed as the number of days' fishing) up by around 250% between 1988 and 1992. Catches too have grown from 750 tonnes in 1988 to 7 300 tonnes (provisional figure) in 1993.

Tables 1 and 2 show respectively the available figures for catches and fishing effort and the increases that have taken place between 1991, 1992 and 1993 in percentages.

Under the terms of the exemption 37 French vessels only were authorized to fish, all other vessels being required to use nets no longer than 2.5 km. In actual fact the number of French vessels fishing for albacore in the northeast Atlantic was above 60 (64) of which only 31 appeared on the exempt list⁶.

As well as these there were 16 Irish vessels and 10 United Kingdom vessels. The driftnet fishing effort targeting this stock rose rapidly therefore from 41 vessels in 1990 to 90 in 1993.

Figure 5 shows the geographical area fished by vessels using driftnets and other gears.

⁶ With the exception of the 37 vessels benefitting from the derogation, all other vessels using driftnets more than 5 km long did so illegally.

The total catch of the Community fleet for 1992 amounted to 27.600 tonnes, broken down by country and type of gear as shown in the table below:

1992	SPAIN	FRANCE	IRELAND	PORTUGAL	UNITED KINGDOM
LIVE BAIT	10,8	0,0 ¹	-	1,6	-
TROLL	7,3	0,0	-	-	-
GILLNET	-	4,9	0,5	-	0,0 ¹
PELAGIC TRAWL	-	2,5	-	-	-

Source: ICCAT and Commission departments. Expressed in '000 tonnes.

¹ 0,0 : less than 100 tonnes

The historical sequence of catches and trends is illustrated in figure 4 which shows the drop in catches taken by France using traditional gears (pole-and-line vessels and longliners) together with the gradual reduction in the number of vessels involved. From 1988, on the other hand, it will be noted that catches, principally those taken using driftnets, have been rising. When added to those of the pelagic trawl fleet these catches are at the level of French catches for 1970. In the case of Spain, the catches of the longline fleet have been falling slowly but steadily. The catches of the pole-and-line fleet have been varying in line with fluctuations in fishing effort.

4.3 The Mediterranean driftnet fishery

Driftnetting is targeted chiefly at swordfish and to lesser extent albacore and other small types of tuna. Article 9a of Regulation (EEC) No 3094/96 applies in the Mediterranean.

The use of driftnets to fish for swordfish (figure 5) is very widespread, Italy being the main user in the Mediterranean with a fleet estimated in 1990 at 682 vessels⁷ but this number appears to have been falling since 1991. A large number of Italian driftnet vessels has continued nevertheless to fish with nets longer than 2.5 km. The fishing area is shown in figure 6.

Spain too has a fleet of low-tonnage vessels targeted also at swordfish and operating close to the Straits of Gibraltar.

The accuracy of catch figures for highly migratory species in the Mediterranean is rather problematical. Catches taken by the Community driftnet fleet, however, are as follows:

⁷ Gli attrezzati pelagici derivanti utilizzati per la cattura del pescespade (*Xiphias gladius*) adulto. Valutazione comparata della funzionalità, della capacità di cattura, dell'impatto globale e della economia dei sistemi e della riconversione. Ministero della Marina Mercantile. 1991.

In the case of Italy catches of swordfish in 1992 amounted to more than 4 000 tonnes. According to ICCAT figures, production reached its highest level in 1988 and 1989 at 10 000 tonnes. Albacore catches in 1992 stood at 1 000 tonnes.

Spanish catches of swordfish in 1992 were slightly above 32 tonnes (ICCAT provisional estimate for 1993).

Discussion of the use of driftnets has not been confined to Community rules. National provisions have existed too or continue to do so. Greece bans the use of driftnets. National legislation in Spain outlaws their use in the Atlantic but authorizes it in the Mediterranean provided they are not more than 1.5 km long.

In Italy regulation entailed a succession of bans and authorizations between 1990 and 1992. Government bans and restrictions have been suspended several times by court decision. The entry into force in June 1992 of the Community rules helped clarify matters.

5. CATCHES AND SELECTIVITY OF VARIOUS TYPES OF GEAR

The effectiveness of a gear depends on its capacity to catch a species or group of species. Selectivity measures the capability of a technique in catching a specific species within a group sharing the same biotope (interspecific selectivity) and, within a given species, its capability in catching individuals within a given size range (intraspecific selectivity).

The Scientific and Technical Committee for Fisheries considers, in its 24th report⁸, that driftnets are very effective in catching albacore tuna but have undesirable selection properties in relation to non-target species.

Their relative effectiveness compared with that of traditional gears was demonstrated during the initial trials carried out by French research workers in 1986 and 1987 (ICCAT, col.vol.sci.pap.XXX, 1989). Since they were first introduced into the fishery gill net yields have risen from 0.63 tonnes of albacore/fishing day in 1988 to 1.72 tonnes/day in 1992. Over the same period longliner yields have fluctuated between 0.56 and 0.48 tonnes/day. Those of pole-and-line vessels over the same period have ranged from 1.05 to 1.71 tonnes/day. To translate these yields per vessel into yields per crew member, it is necessary to consider the following crew numbers: 5 to 8 men for the driftnetters, against 5 to 6 for trollers and 12 for baitboats.

Live-bait fishing does not entail by-catches of other species. During trolling accidental catches of Ray's bream (*Brama brama*) and sea birds have been noted. All the available information on by-catches indicates that gillnets have drawbacks insofar as interspecific selectivity is concerned. Catches taken by the French driftnet fleet in 1992 and 1993⁹ consisted of 48 different species (albacore accounting for 85% of the total in terms of the number of

⁸ SEC(93) 1993 of 7 December 1993.

⁹ Approche de l'impact écologique de la pêche thonière au filet maillant dérivant en Atlantique nord-est - IFREMER report presented to the STCF

individuals). By-catches comprised cephalopods, reptiles (sea turtles), sea birds and marine mammals. The catches of the Italian driftnet fleet (figures for 1990 and 1991) included a total of 74 species taken with the target species, swordfish (which accounted for 17.6% of the total catch in terms of the number of individuals).

As for the intraspecific selectivity, the distribution of sizes for driftnetting catches in the North Atlantic is similar to that for trolling. Catches are mostly of juveniles with sizes ranging from 60 to 80 cm for both techniques. The size distribution for baitboat catches spans a wider range (50 to 100 cm). Juveniles predominate in catches, but beyond 80 cm adults are present. Catches from pelagic trawls are of similar sizes to those from driftnets and lines, except late in the fishing season when the proportion of adults increases. The intraspecific selectivity of driftnetterst is not significantly different from that of trollers and bait boats. All these methods of capture take mainly juveniles, whereas deep longlines take adults essentially. The latter technique which is practiced by Asian vessels in the North Atlantic has however, practically never been utilised by European vessels.

Driftnet vessels fishing for swordfish catch individuals which are on average older than those caught by European vessels fishing with surface longlines.

6. BY-CATCHES

6.1 Nature and size

Annexe I shows the resulting figures.

By-catches of no commercial value represent one of the major factors in this debate. Cetaceans, reptiles and sea birds are discarded at sea. Some of these are species protected by the Berne Convention (Council Decision 82/72/EEC¹⁰) and the Convention on international trade in endangered species of wild fauna and flora (CITES) (Council Regulation (EEC) No 3626/82)¹¹.

The latter provides for maximum (total) protection for two species of whales, the sperm whale and the common finback.

In 1992 the dolphin catch of the French driftnet fishery was 0.11 dolphins per kilometer of net shot per year. No information is available concerning the dolphin catches of the Irish or UK fisheries.

That available for the Mediterranean fishery is very limited and specific. In the case of the Italian fleet information is qualitative rather than quantitative. Catches of large whale (*Balaenoptera Spp.*) are taken "occasionally" and "accidentally" while those of the various species of dolphins are 8 "common". The quantitative data give an average of 0.015 dolphins caught per kilometer of net per year.

6.2 The impact of albacore fisheries on dolphin populations

Dolphin mortalities associated with the French driftnet fishery come to approximately 400 common dolphin, 12 000 striped dolphin and 100 other cetaceans. These represent 0.68% (common dolphin) and 1.62% (striped dolphin) of the estimated numbers of the relevant

¹⁰ OJ No L 38, 10. 2.1982, p. 1.

¹¹ OJ No L 384, 31.12.1982, p. 1.

populations. According to the IFREMER¹² study the removal of these will not cause an appreciable drop in numbers in the short term.

A long-term forecast cannot be made, even if the survival of the populations is not directly at risk. The long life-span of the species in question means that catches have different but cumulative effects, especially where, as is the case here, juveniles make up the bulk of catches.

The quantity of other cetaceans, birds and turtles caught is small but the level of exploitation is unknown. There is reason to suspect that blue shark and Ray's bream populations are highly vulnerable too.

The Scientific and Technical Committee for Fisheries (STCF) met on 15-17 November 1993. One of the topics dealt with was the ecological impact of the driftnet fishery. Two reports from French and Spanish research institutes were presented to it for consideration.

The Committee set out its views on the impact of albacore driftnetting in the northeast Atlantic. While unable to quantify the ecological risk it noted that by-catches taken by the French fleet were substantial (more than 1 700 dolphins annually) to which must be added a further 30% for mortalities accounted for by the fleets of the other countries involved in the fishery.

The STCF considers that:

- cetacean populations should be maintained at a level above 50% of their maximum numbers, and
- that the number removed annually should be kept below 2% of those numbers¹³.

The STCF notes that catches of common dolphin are within the above criteria but that those of striped dolphin might be higher than the 2% limit.

6.3 Prospects of limiting dolphin catches

6.3.1 Action taken by the Inter-American Tropical Tuna Commission

Seiners fishing for albacore (*Thunnus albacares*) in the central-eastern Pacific, a zone covered by the Inter-American Tropical Tuna Commission (IATTC), take dolphin as by-catches. The IATTC has been running a special programme to reduce these dolphin mortalities. Considerable progress has been achieved by introducing technical adjustments to nets (purse seines) together with changes to fishing operations, resulting in a 99% reduction

¹² Institut Francais de la Recherche pour l'Exploitation de la Mer

¹³ This figure is half the average annual renewal rate for the population which has been estimated at between 2 and 6%. Similar criteria were used for the US legislation for reducing dolphin mortalities associated with albacore fishing in the Eastern Tropical Pacific.

in mortalities. A cut in fishing effort too has contributed to the reduction. The target for 1999 is a mortality rate close to zero.

6.3.2 Reduction of driftnet fishery by-catches

A number of technical steps have been taken in an effort to reduce by-catches, particularly of dolphin and other cetaceans. The submersion of the headline at a depth of 2 m below the surface was included among the technical requirements imposed in respect of fishing under the exemption arrangements. In practice this measure has not proved to be ecologically beneficial and it is not possible at present to state categorically that it is effective in preventing the capture of marine mammals. The submersion of the headline has nevertheless proved to be highly effective in reducing risks to navigation (see Annex 2).

The installation of signal transmitters and other devices for warning marine mammals of the presence of nets in their path has also been discussed. Their effectiveness has not been demonstrated however. Some specialists believe that the acoustic detection capabilities of young dolphins are not sufficiently developed since 80% of the dolphins caught by driftnetters fishing for albacore are juveniles.

The methods used by the IATTC to achieve a substantial drop in dolphin mortalities cannot be applied to driftnetting. The "active" nature of the purse seine fishery means that there is human involvement when the tuna school is being surrounded, during the towing of the net and when the tuna is being landed. Considerable human resources, as well as material ones (auxiliary vessels), are placed in the water to remove the live dolphins from the seine before the net is hauled in. Driftnets are distinctive in that they are "passive" during fishing and human involvement in the screening of target species is limited, if it exists at all.

As matters now stand there is no guaranteed way, therefore, of achieving a reduction in the by-catches of mammals taken by driftnet vessels.

7. INTERFERENCE BETWEEN DRIFTNET VESSELS, LONGLINERS AND POLE-AND-LINE VESSELS IN ATLANTIC ALBACORE FISHERIES

7.1 Biological and technical aspects

Between 1990 and 1992 driftnet fishing effort increased by 120% while the yields obtained using traditional gears fell. This fact may be considered together with the problem of interference between fishing gears but scientific analysis is difficult. The matter is further complicated by the fact that as well as landings there are additional mortalities (fish lost during the hauling in of the net) which cannot be quantified.

In any event traditional and new gears (pelagic trawl and gill nets) are competing for the stock and must first contend with its growing scarcity. The overriding question in this connection is that of the overall level of exploitation. In November 1993 an estimate of Atlantic albacore stocks was made by the Standing Committee on Research and Statistics (SCRS) of the International Commission for the Conservation of Atlantic Tunas (ICCAT). Until recently it was believed that exploitation was moderate. Now that analysis has been altered slightly. Depending on the methods used the estimates suggest various situations. The old analysis of low to moderate exploitation is confirmed by some while others indicate heavy

exploitation, alongside the recent fall in recruitment for which there is no firm explanation (impact of the fishery or of the environment?). The impact of driftnet vessels on the stock must not be singled out in any case since they catch the same fish as the other vessels (longliners, pole-and-line vessels, pelagic trawls) exploiting this stock.

Apart from the drop in abundance of albacore, longliners and pole-and-line vessels highlight the harmful effect of driftnetters on fish availability. On the scientific level the question remains open. On the practical level, even if the former fish primarily at night and the latter by day, coexistence is problematical, particularly in the first half of the season (spring to early August) since the fishing grounds then overlap (figure 6). Serious incidents have occurred between the various fleets.

7.2 Socio-economic aspects

On account of their production costs French fishermen no longer find trolling for albacore economically viable, even if the situation is slightly more complex for the pole-and-line fleet. Driftnetting, on the other hand, is profitable and can be very lucrative when the nets used (illegally) are more than 5 km long. According to the STCF each crew member requires 1 km of net for this fishery to operate profitably. The same probably applies in the case of Irish and UK driftnetters. The general crisis in the industry, declining prices and the overfishing of traditional stocks make driftnetting very attractive. Driftnetting for albacore has provided a significant source of income, legal or otherwise, for the vessels in question.

Both France and Ireland attach great importance to the maintenance of this activity. Ireland has therefore suggested the performance of a fishery with nets longer than 2,5 km, open to access by Member States other than France but with limitation on catches and effort and with accompanying scientific investigation.

While the albacore fishery has played a major part in balancing the accounts of the driftnetters, it is continuing to play a similar role for the fleets using the traditional techniques, particularly on the northern coast of Spain. These fishermen see driftnetting as undermining their income as well as landing prices. Driftnet catches are sufficiently large to affect prices, pulling them downwards: even though less than those obtained using traditional techniques, they increase supplies while the products landed are of poorer quality for the same length of trip. However, it is difficult to explain price variations for longfinned albacore tuna (see table 3).

While it is difficult to quantify the various forms of interference between gears, the profits of vessels using the traditional techniques (more than 700) are low, making them vulnerable to reductions, including modest ones, in yields and prices. When account is taken of associated crew numbers, the social impact becomes important: more than 5.00 direct jobs.

7.3 Conversion possibilities

Vessels which operated in the driftnet fishery in 1992 and 1993, whether or not benefitting from the 5 km derogation, are technically capable of fishing with fixed and towed gears. The large majority of them were built before the development of the albacore driftnet fishery. They are no different from other vessels in the specific size range, 15 to 24 m, with a number concentrated around 20 m (Fig. 7). France has sufficient quotas of the stocks, apart from anchovy, accessible to these vessels. Technically, therefore, conversion can be considered within the CFP rules.

From a biological point of view, most of the relevant benthic and demersal stocks are intensively fished however. Even if the potential fishing effort of the driftnet fleet is small compared with the present effort, the conversion of the driftnetters to trawling for demersal stocks such as Northern hake would be the least satisfactory conversion.

Conversion could give rise to economic problems. Assistance could be provided in the form of transitional measures which would allow for the fact that lawfully acquired gear could become unusable before it had been fully depreciated. In such a case support might be available in relation to the cost of the existing nets or of acquiring gear needed for practising other forms of fishing. The immediate cessation of fishing could moreover complicate the rapid adoption of long-term solutions. In these circumstances temporary cessation allowances would be entirely justified.

The island of Yeu poses a particular problem : 21 vessels used driftnets to fish for albacore in 1993, of which 15 benefited from the derogation. This gear accounts for a significant proportion of fishing activity, itself the linchpin of the island's economy. If driftnetting for albacore were to cease, apart from temporary measures to help avert an immediate crisis, a comprehensive plan would have to be worked out for exploring all the alternative forms of employment and, once the solutions had been selected, for provide the requisite funding.

To facilitate reconversion and adaptation of driftnetters, several instruments are available,. Firstly, the island of Yeu has objective Vb status. Generally, both the FIG and PESCA Community initiative could support the necessary mesures

8. THE MONITORING OF DRIFTNETTING

8.1. Monitoring possibilities (see Annex 2 for detailed study)

Item to be controlled	Can be controlled at sea	Can be controlled in port
Length of nets on board	YES	YES
Length of nets in use	YES	NO
<u>Technical conditions</u>		
- submersion of headline	YES	NO
- attachment to vessel	YES	NO
Fishing Area	YES	NO

As the above table shows, effective control over the restrictions in force on the use of driftnets can only be assured through appropriate monitoring and inspection at sea by the Member States concerned.

Determination of the length of nets carried on board in port cannot be relied upon as an efficient control since fishermen will avail themselves of the many different ways by which net lengths in excess of that authorised will be hidden, either on land or even at sea.

Effective control at sea obviously requires that sufficient appropriate resources are committed by the Member States inspection authorities.

Within the fishing zones under national sovereignty this requirement should impose no additional burden on the authorities concerned. In certain fisheries however, notably that of the NE Atlantic Albacore fishery, 90% of fishing effort is conducted on the high seas, frequently well outside waters under national jurisdiction. Whilst the Member States concerned possess the material means necessary for the long distances required, there remains the consequence that devoting important resources to the monitoring of one fishery could leave significant gaps in the control of others unless sufficient resources are available. Moreover, since in international waters Member States may only exercise direct control over their own-flag vessels, complete effective monitoring of the total Community fleet engaged in for example the 1993 Albacore driftnet fishery (90 vessels), would have required the continuous presence of at least one patrol vessel for approximately four months, from each of the three Member States whose vessels participated.

8.2 The scope of effective monitoring

The Commission asked the Member States concerned as far back as the first half of 1992 to inform it of the specific control measures they intended introducing. It received no replies. In 1993 Community inspectors carried out special inspection visits at sea and on land. Spain conducted a large-scale monitoring operation at sea.

A study of the available information together with the abovementioned inspection visits and monitoring confirmed that there had been serious breaches of the rules and that the measures taken by Member States practising driftnetting on the high seas were largely inadequate. A large number of driftnet vessels operating both in the Mediterranean (Italy) and the Atlantic (France, Ireland, the United Kingdom) and not covered by the derogation have used nets very much longer than 2.5 km, frequently not even complying with the requirement that the net be attached to the vessel. In the case of those operating within the derogation both the upper limit of 5 km and the requirement that the headline be submerged have been breached. Landings in 1992 and 1993 are inconsistent with compliance with the statutory lengths. The scale of the irregularities reveals the serious inadequacy of the Member States' control measures. These shortcomings are all the more serious since monitoring of ocean driftnets is especially difficult. The remoteness of the fishing grounds makes fraud easier. The Member States operating in these fisheries could have established far more effective monitoring. Before, oceanic driftnets were prohibited, Japan, Korea and Taiwan had shown the way to follow by utilising the appropriate technologies (monitoring by satellites), combined with management of authorised zones and controls at sea, supported by a licencing regime and sanctions. The UN debate has nevertheless demonstrated the difficulties of controlling oceanic driftnetting. It will thus always be difficult to prevent free access for nets theoretically shorter than 2.5 km (or another upper limit) from facilitating fraud.

9. POSITION OF THE EUROPEAN PARLIAMENT

Parliament has shown great interest in all matters connected with driftnets, in view of the acute public awareness of the subject, and of the problems raised by the future of the fleets concerned. At the part-session of 7 to 11 October 1991 it expressed a positive opinion on the eleventh amendment to Regulation (EEC) No 3094/86¹⁴.

It again set out its views on the matter of driftnets at the part-session of 13 to 17 December 1993. In its most recent resolution¹⁵ it proposes a total ban on the use of driftnets but considers that the Commission could, on the basis of a reasoned application from a Member State, authorize their use within the 12-mile limit.

¹⁴ Council Regulation (EEC) No 354/92, OJ No L 42, 18.2.1992, p. 15.

¹⁵ EP 177.124, Minutes 50 II, 17.12.1993.

10. CONCLUSIONS

The debate over the use of ocean driftnets started in the Community more than five years ago. Despite considerable opposition and concerned voices, a temporary derogation was introduced in 1991 permitting a limited number of vessels to continue using nets longer than 2.5 km for taking long-finned tuna. This offered a chance of studying how far a controlled fishery in which large nets are used could be compatible with the general objectives of the CFP, foremost among them being responsible fishing and the elimination of threats to the survival of marine resources of all kinds as well as deriving the best possible use from these resources by the resolute reduction of discards.

Use has been made of this transitional period to carry out detailed scientific studies which, among other things, have provided a better evaluation of certain types of by-catch and their immediate consequences. However, techniques for using driftnets in such a way that by-catches, in particular of dolphins, are reduced have not been developed during that period. It proves not possible to reduce the environmental impact of large nets to a level that would be compatible either with the political will to promote responsible fishing or with the international commitments of the European Union and its Member States within the United Nations and regional fishery commissions. The option of institutionalizing a derogation above the 5 km limit is simply not available.

The Member States concerned have not in any case introduced control arrangements that are at all adequate in this respect. This is an issue going beyond any discussion of what action to take regarding the existing derogation. That derogation has encouraged wide-scale irregularities; but even in the case of Member States and/or fishing fleets not covered by it, the existing rules have not been applied. Such cheating has been made particularly easy by the possibility of using nets under 2.5 km long. Rigorous measures nevertheless have to be adopted to prevent a further expansion of fishing effort by driftnetters, since the immediate return on this type of fishing is very high. Very many fleets are attracted by it, well beyond the circle of Member States which give it their approval.

These findings point clearly to the conclusion that continuing with the status quo is not an acceptable option. Specific controls good enough to cope with inspections on the high seas and with the scope for fraud will have to be brought in, making full use of past successes in this field.

The allowing of nets up to 2.5 km long has to be seriously questioned. First of all, it is a cardinal factor in fraud. Secondly, it is an avenue through which the use of driftnets can be expanded. It is conceivable that fisheries might be established that take advantage of auxiliary vessels, areas of fish concentration or other efficiency-enhancing factors to earn a return with nets under 2.5 km. Since the fundamental problem is the total fishing effort deployed by driftnetters, the current difficulties would continue. The associated by-catches, even those due to nets under 2.5 km, would result in the well-known environmental problems.

Steps have to be taken, then, to prevent an expansion of the use of nets under 2.5 km and to prepare for a complete ban, after an inevitable adjustment phase, on all ocean drift nets for taking tuna, swordfish and other high-seas species. To be effective, the deadline should

not be too far away. A gradual run-down of activities would be needed in the mean time. A grace period of four years would be conceivable.

In this same general line of thinking, it has to be said that the existing UN resolutions are quite inadequate to the purpose. An initiative thus needs to be taken to secure a new and more robust resolution that will lead to the eventual elimination of ocean driftnets altogether.

The necessarily vigorous attack on the issue has to be two-pronged: immediate and effective controls, coupled with the disappearance of ocean driftnets in the longer run. Of course, the difficulties of the transition need to be dealt with as well. Setting four years for the elimination of nets under 2.5 km takes these into account. Such a transition can be achieved if total effort is contained, and could be considerably shortened if effective controls are applied. In the same spirit, the special case of vessels that have enjoyed a 5 km derogation in 1992 and 1993 could be dealt with by a transition of several months. This is because, as the studies carried out have shown, a derogation over a very limited period, with effort very strictly confined to the 1993 authorized level, would have a reduced environmental impact.

These transitional periods constitute an initial response to the commercial difficulties that will be faced by driftnetters. To supplement this, there have to be structural adjustment measures. It will be up to the Member States affected to propose suitable schemes under the FIGG, and up to the Commission to consider them favourably. Driftnetters have to be induced to undergo rapid re-orientation, if possible before the end of the relevant transition periods. Technical measures can further help to secure the mid-term future of the European tuna and swordfish fisheries. Here the stress should be on approaches that combine selectivity and efficiency. A concerted programme of adaptation to techniques currently employed only rarely in Europe (such as deep longlining) and modernization of selective methods already used by the Union's fishermen (such as pole-and-line fishing), maybe including the search for other possibilities also, should therefore be set up and part-financed.

ANNEXE I : BY-CATCH DISTRIBUTION BY SPECIES FOR FRENCH DRIFNETTERS TARGETTING LONG FINNED ALBACORE TUNA IN THE NORTH ATLANTIC (BASED ON A SAMPLE OF 837 KM OF DRIFNETS, 1989-91)

Species	Catches (individuals)
Long finned albacore (<i>Thunnus alalunga</i>)	42.541
Bluefin tuna (<i>Thunnus thynnus</i>)	37
Swordfish (<i>Xiphias gladius</i>)	57
Ocean sunfish (<i>Mola mola</i>)	4
Ray's bream (<i>Brama brama</i>)	1.716
Sharks	2.158
Dolphins	60
Turtles	1

Source: 20th Report of the Scientific and Technical Committee for Fisheries, 20 september 1991, SEC(91) 2135, Brussels, 8.11.91

ANNEXE 2

I The Regulation

Council Regulation (EEC) N° 345/92¹⁶, amending for the eleventh time Regulation (EEC) No 3094/86¹⁷, laying down certain technical measures for the Conservation of fisheries resources, establishes the conditions under which Community fishing vessels may utilise driftnets.

This Regulation provides that :

- a) No vessel can keep on board or use driftnets, the total length of which exceeds 2.5 km.
- b) A derogation shall apply to an approved list of vessels entered in a Community register which may use driftnets whose total length may not exceed 5 km in the NE Atlantic Albacore tuna fishery, until 31 December 1993. Unless the Council decides to extend it, this derogation expires on the above mentioned date.
- c) Vessels fishing under the derogation mentioned in point b) above, with nets of up to 5 km are required to submerge the headline, for its entire length by at least 2 m.
- d) Throughout each fishing operation the net must, if it is longer than one kilometre, remain attached to the vessel when fishing takes place outside the 12 mile coastal band.
- e) The conditions in points a), b), c) and d) above apply in all waters except the Baltic Sea, the Belts and the Sound under Member States jurisdiction, and outside those waters, to all Community fishing vessels.

II Controllability of the restrictions on the use of driftnets by community fishing vessels established by regulation 345/92

II.1. The length of driftnets

Estimates or measurements of the length of driftnets carried on board may be carried out in port or at sea.

¹⁶ OJ N° L42, 18.02.92, p.15.

¹⁷ OJ N°L288, 11.10.86, p.1

Measuring nets on board vessels at sea and in port

Actual measurement, metre by metre, of the length of net on board is not possible at sea and is usually impractical on board for the purpose of routine checks. However this is the most accurate means by which net length can be determined and is the method which may have to be resorted to for example in harbour, when an inspector's estimate is challenged.

A relatively quick and simple method of estimating the length of driftnets on board is to measure the volume of net and apply a stowage coefficient to the volume. Driftnets are invariably stowed on board, ready to use, in regular shaped containers which allows their volume to be easily calculated. There is, according to the Commission's inspectors, very little variability in the types and materials of driftnets in use by the Community fleet, which means that in practice a very limited range of stowage coefficients would be required to enable quick and efficient estimations of net lengths carried on board fishing vessels.

Measuring nets in the water

Three methods are available to measure the length of a driftnet in the water.

- a) Using Radar Range: this is the most common and simplest method. A good radar capable of detecting small targets at ranges of at least 10 km is required. One end of the net is marked using the fishing vessel or the boarding boat and the radar distance is measured from the other end of the net. The resulting range is in nautical miles and this must be converted to Km. This method does not allow for any curvature of the net in the water and relies on the use of the fishing vessel or boarding boat. The boarding boat may have to be fitted with a radar reflector or have a radar transponder on board. It is also weather dependent to some extent as rough sea conditions may hide the target vessel in sea clutter on the radar.
- b) Using GPS: GPS is the Global Positioning System and is a highly accurate satellite based navigation system now widely used in the marine field. Mobile GPS receivers having an elapsed distance facility are available and could be used from a boarding boat or a mother ship to accurately follow the path of a net in the water and so give the actual length of the net. Use of Differential GPS, if available, would enhance the accuracy of this method. This method does not necessarily involve the use of other boats and is therefore less weather dependant than other methods.
- c) Using a Ships Log: A good quality electronic log with a distance trip facility, fitted to a boarding boat following the path of the net in the water will give an accurate length of net use.

II.2.2. Technical conditions governing the use of driftnets; submersion of headline and requirement for nets to remain attached to the vessels.

The requirement for derogatory vessels fishing with driftnets up to 5 km in length to submerge the entire length of the headline and for the general requirement for vessels to remain attached to their nets can only be monitored by direct observation at sea.

Direct observation can determine whether a headline is floating on the surface or whether it is submerged. Such observation will not easily determine the precise extent to which a headline not floating on the surface has been submerged however. Whilst not impossible, it is not considered to be practical for inspectors to determine this. It is reasonable to assume that a fisherman who has taken the trouble to rig a net with its headline submerged will have done so with a view to meeting the requirements of the regulation.

Monitoring of the requirement to remain attached to the vessel can be met by direct visual observation during the course of fishing operations.

III. Effective monitoring of council regulation (EEC) n° 345/92.

Subsequent to the adoption of Council Regulation (EEC) N° 345/92, the Commission requested the Member States to forward information with respect to those vessels which were considered to be eligible for inclusion in the derogatory list and how the new conservation and control measures would be implemented and monitored by national enforcement agencies. Following the conclusion of this process, a total of thirty seven French vessels were included in the Community register for 1992. Ireland replied by saying it had no vessels for inclusion on the derogatory list.

The Regulation entered into force on 01 June 1992.

The Commission received no replies to its initial requests to the Member States concerned on how the new technical measures relative to driftnets would be monitored and enforced by their competent authorities during the 1992 fishing season.

III.1. Mediterranean driftnet fishery

During 1992, reports reached the Commission of a number of cases, notably of Italian vessels which had been found to be fishing illegally with driftnets in waters under Spanish and Greek jurisdiction.

The Commission took this up with Italy who gave assurances that their authorities were taking the necessary measures to implement the rules fully and ensure compliance by Italian fishermen. In spite of these, further illegal incidents by Italian vessels during the 1993 season were reported by Spain.

As a follow up to these events Commission inspection teams visited Italy in May and in August 1993 to evaluate the monitoring and enforcement effort by the competent authorities. The reports of these visits concluded that whilst Italy had introduced national legislation which in fact goes beyond the requirements of Community law, in that it is more restrictive, application of the Community regulation was not uniform nor fully implemented.

During the meeting of the scientific committee of ICCAT in November 1993, it was mentioned that the average length of driftnets used by Italian fishermen mostly exceeded 2.5 km during the 1992 season.

III.2. North east atlantic albacore tuna driftnet fishery

During the 1992 fishing season the French authorities announced to have mounted information campaigns directed at the professional sector to explain the new conditions restricting the use of driftnets, and that controls, notably on the length of nets, were carried out on board fishing vessels prior to their departure from port, and subsequently upon their landing.

In 1993 the French authorities supplemented this effort by monitoring at sea the activities of the French fleet between July and September.

Following a request by the Commission, the UK authorities reported that 5 UK registered vessels were expected to participate in the fishery in 1993, that net lengths were controlled before sailing, but that in any event the vessels concerned would not have the physical capacity to carry nets in excess of 2.5 km.

Subsequently, in November 1993, the Commission was informed informally that in fact 10 UK registered vessels participated in the fishery in the 1993 season.

It should be noted that in 1992 Member States did not demonstrate they mounted controls at sea to monitor the use of driftnets by vessels flying their flag in international waters where the bulk of activity (90%) by the Community fleet occurs. Spain however, whose fleet does not use driftnets in this fishery, provided a patrol vessel to survey activities in 1992. But the the fishery is conducted in international waters Member States may only exercise direct control over their own flag vessels.

During the 1993 fishing season EC inspectors embarked on French and Spanish patrol vessels and accompanied national officials monitoring the driftnet fleet ashore in France and Ireland. In December the Irish authorities in a letter to the Commission indicated they had taken appropriate measures for an efficient monitoring. No evidence has been however transmitted to the Commission.

This effort by the Commission should be seen against the background that statistical evidence points clearly to the fact that in 1992, the introduction of Community measures restricting the use of driftnets by Community vessels had no impact on reducing the level of fishing effort or of catches, contrary to its intended effect.

In spite of the Commission's efforts in appealing to the Member States concerned to take all appropriate and necessary measures aimed at ensuring respect of Community rules, which included placing EC inspectors to witness controls on the spot, expansion of the Albacore driftnet fishery continued unabated in 1993.

Although none of these were authorised to use nets of more than 2.5 km., the following number were observed with nets of significantly greater length, in some cases > 5 kms.

M.S.	Number of Presumed Offences
FRANCE	14
IRELAND	9
U.K.	3

In addition to the above 4 cases were observed of derogatory vessels using nets in excess of the maximum permitted length of 5 km.

As well as observations on the length of driftnets used, EC inspectors reported very poor levels of compliance with the technical conditions requiring vessels to remain attached to their nets and for the requirement by vessels benefiting from the derogation to submerge the headline of the net by at least 2 metres.

With respect to the latter, not one single instance of compliance was recorded. Moreover national inspectors were not seen to make any attempt to enforce these requirements.

A number of incidents where fishing vessels and patrol vessels had their propellers fouled by floating driftnets was witness to the fact that nets were not properly tended or adequately marked, particularly during hours of darkness.

As a rule the presence of headlines on the surface poses a threat to navigation. Observation at sea by the Commission's inspectors confirms that this is considerably lessened by submerging the headline, even by a small amount.

Table 1: Community fishing effort and albacore catches in the gill net fishery

Year	Number of vessels			Fishing days			Catches (tonnes)			
	F	IRL	UK	F	IRL	UK	F	IRL	UK	TOTAL
1987	2			n.a.			150			150
1988	20			1200			750			750
1989	37			1450			1400			1400
1990	41			1299			2100			2100
1991	45 ¹	1		1904	n.a.		3400	n.a.		3400
1992	50	7	1 ³	2600	n.a.	35 ³	4465	451	43 ³	4959
1993	64 ²	16	10 ³	n.a.	n.a.	327 ³	4968 ²	1930	402 ³	7300 ²

¹ Commission estimate

² Provisional figures

³ Unofficial figure

Table 2. Increase in effort (in percentages) observed in the gill net fishery

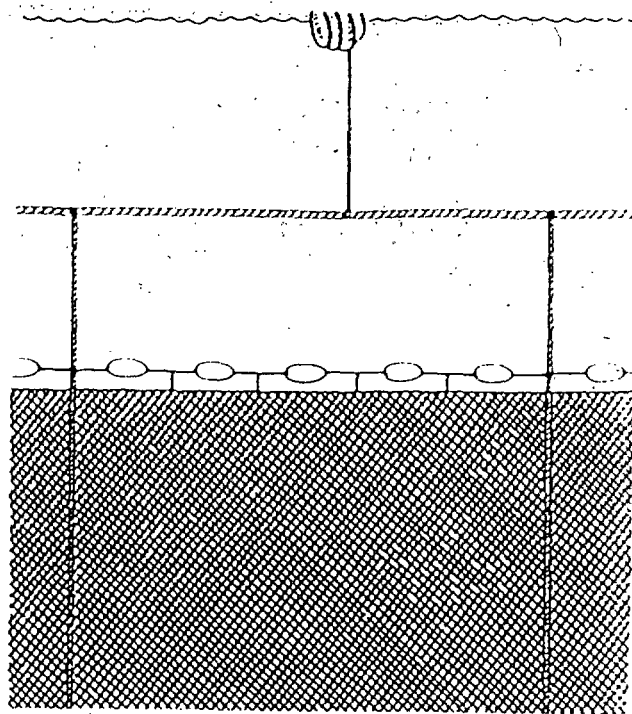
Periods	Number of vessels	Fishing days	Catches
1990-1991	+12%	+47%	+62%
1990-1992	+41%	+103%	+136%
1990-1993	+120%	n.a.	+248% ¹

¹ Provisional figure

Table 3 : Relative importance of albacore tuna (*Thunnus alalunga*) to world fisheries and to the community market

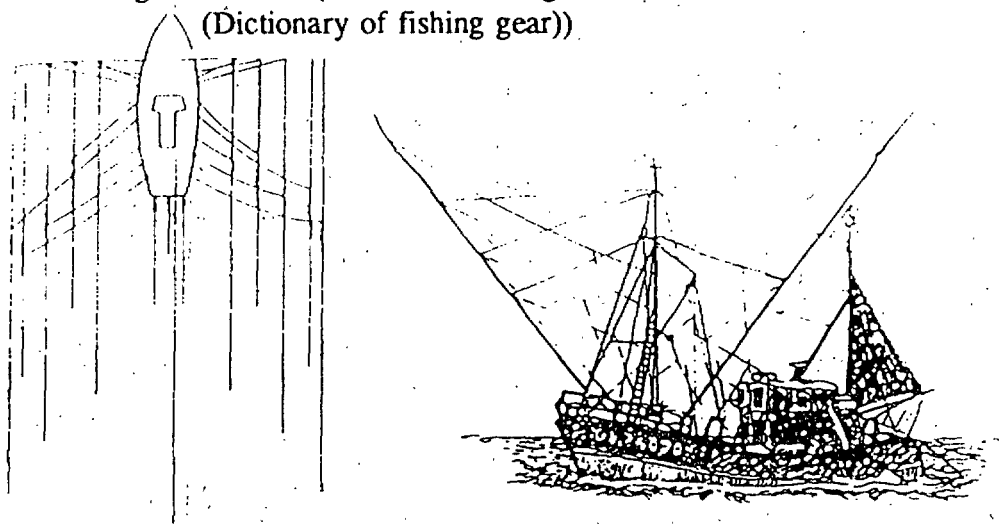
Table 3a : COMMUNITY CATCHES OF ALBACORE TUNA BY DRIFNETTERS AND WORLD CATCHES OF TUNA ('000 tonnes)								
Species	1985	1986	1987¹	1988	1989	1990	1991	1992
Albacore catches with driftnets	0	0	0,1	0,7	1,4	2,1	3,4	4,9
Albacore world catches	187	211	211	225	244	232	168	n.a.
Yellowfin world catches	724	798	866	912	965	1.058	1.011	n.a.
Tunas, bonitoes & billfishes total	3.201	3.504	3.644	4.064	4.081	4.373	4.478	n.a.
Table 3b : AVERAGE IMPORT PRICES ON COMMUNITY MARKET (ecus/tonne)								
Albacore	2.085	1.555	1.350	1.423	1.451	1.153	1.115	1.510
Yellowfin (>10 kg)	1.526	1.130	1.159	1.135	1.003	917	760	751
Table 3c : AVERAGE PRICES ON COMMUNITY MARKET (ecus/tonne)								
Albacore for fresh consumption	n.d.	n.a.	n.a.	n.a.	n.a.	n.a.	1.920	2.088
Albacore for canning	2.078	1.100	1.003	1.755	1.526	1.305	950	1.195
Yellowfin for canning (>10 kg)	1.493	1.130	1.246	1.313	1.005	1.030	793	794

¹ Following the accession of Spain and Portugal and a modification of the custom system of coding, average prices for the period following 1987 are not strictly comparable with those of the preceding period



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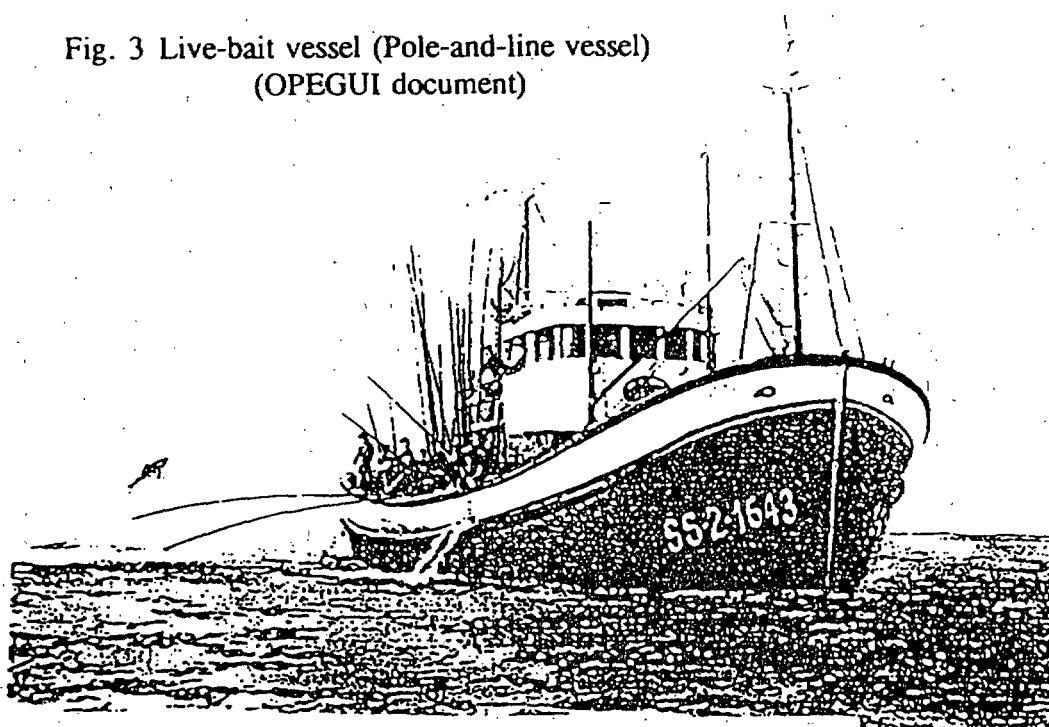
Fig. 1 Driftnet (taken from Georges et Nédélec - Dictionnaire des engins de pêche - 1991 (Dictionary of fishing gear))



2

Fig. 2 Troller (long-liner) (taken from Georges et Nédélec - Dictionnaire des engins de pêche - 1991 (Dictionary of fishing gear))

Fig. 3 Live-bait vessel (Pole-and-line vessel)
(OPEGUI document)

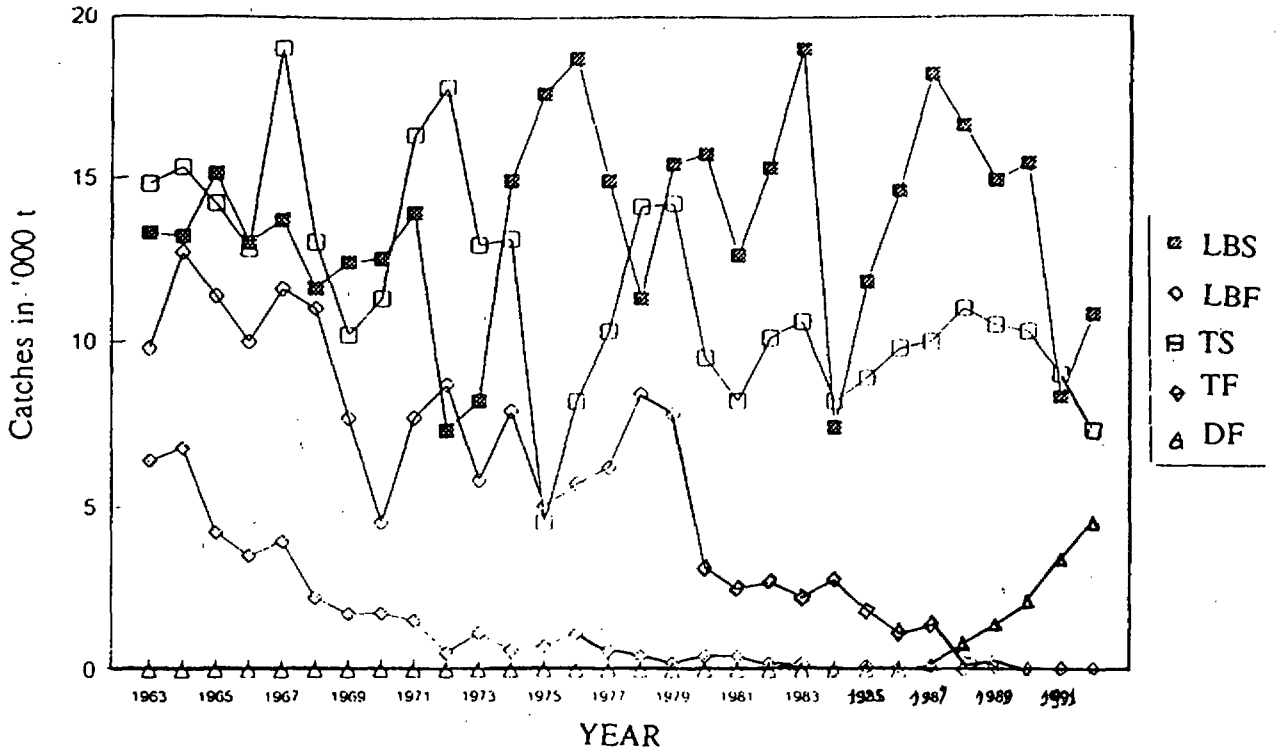


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FIGURE 4 :

ATLANTIC ALBACORE
Catches by country and by type of gear



LBS = Live bait Spain
LBF = Live bait France

TS = Troll Spain
TF = Troll France
DF = Driftnet France

Source: ICCAT data - SCRS report - 1993

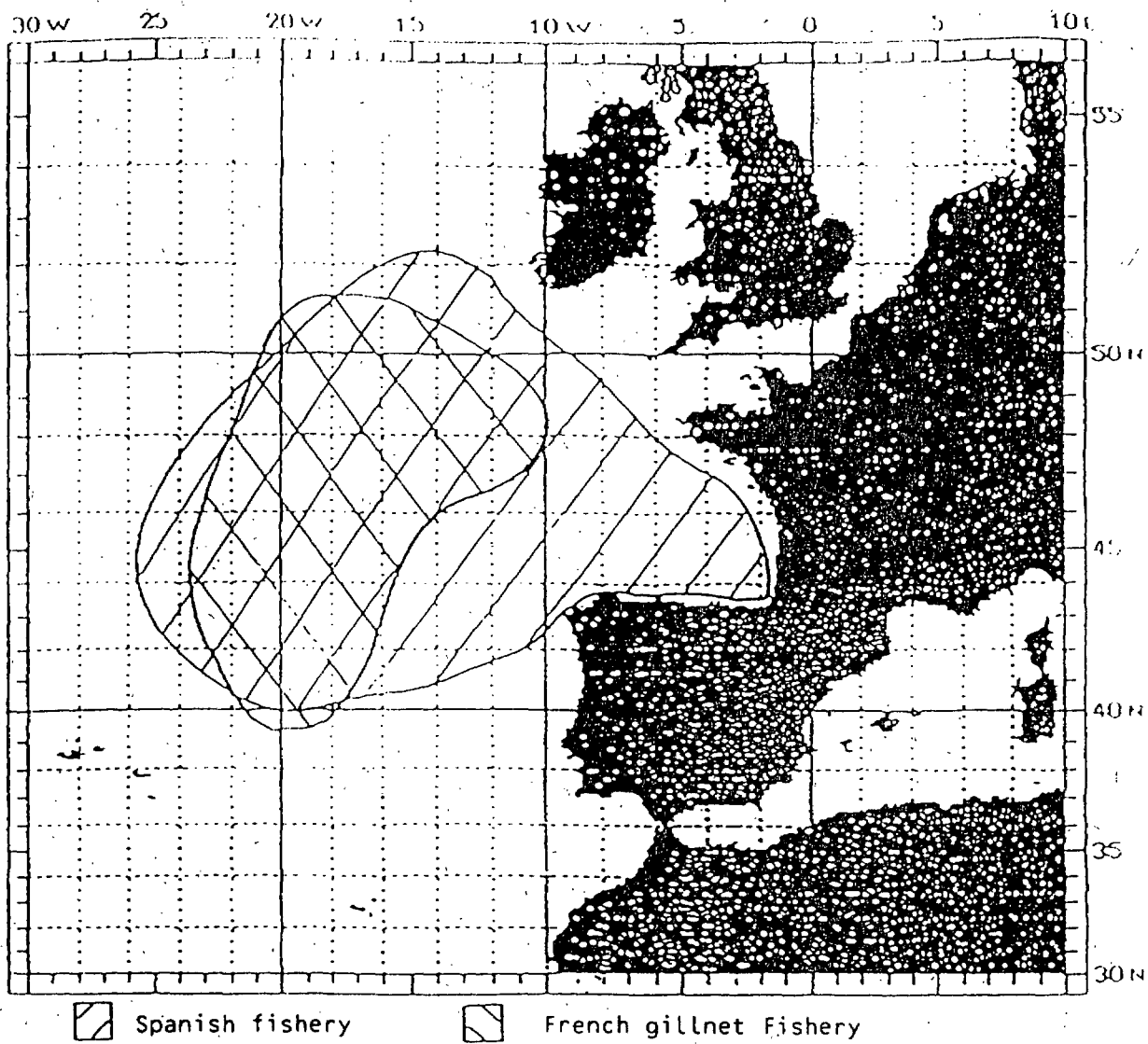
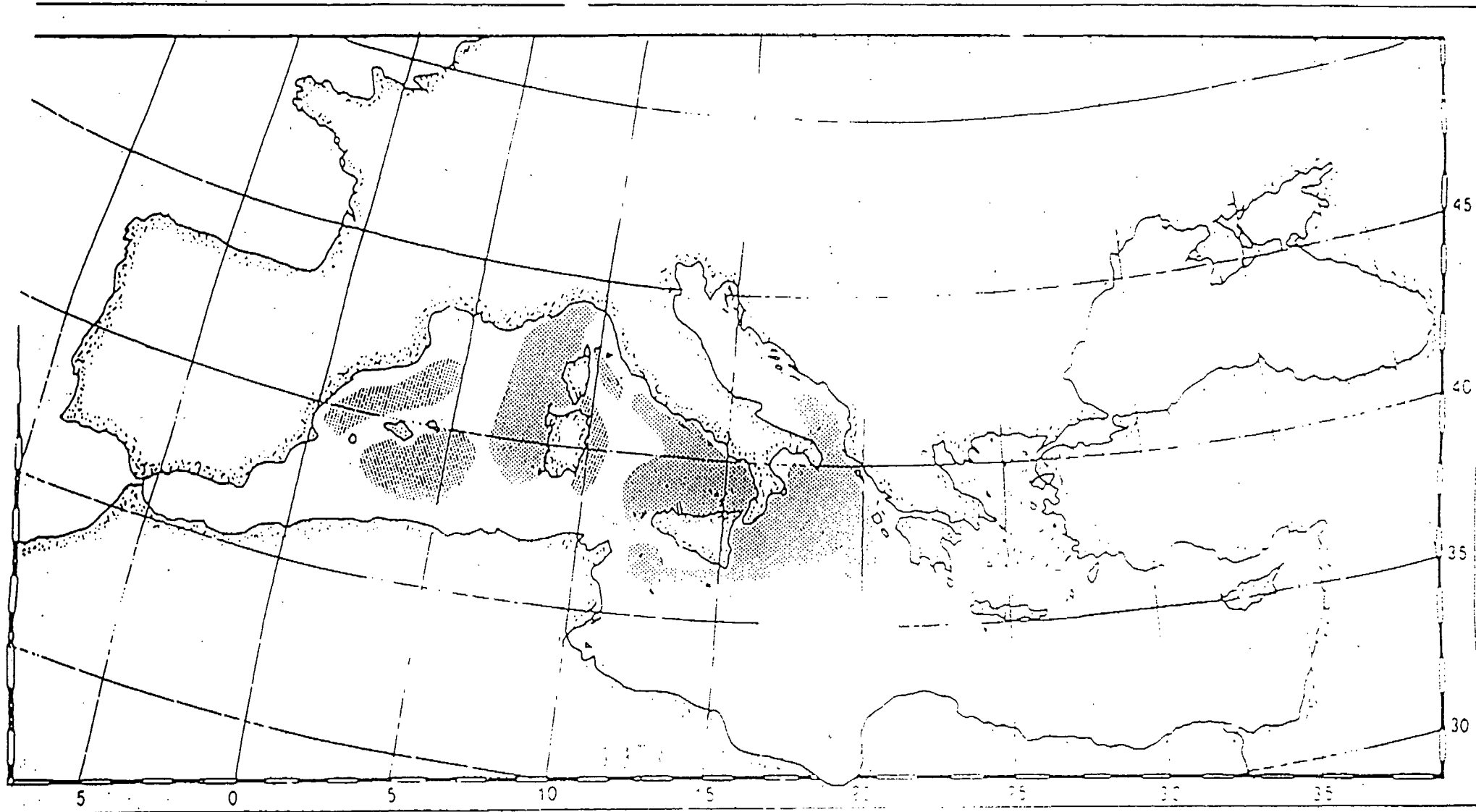


Figure 5: Spanish (troll and live-bait) fleet and French (driftnet) fleet fishing grounds

Source: 24th Report of the Scientific and Technical Committee for Fisheries



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Figure 6: Italian driftnet fleet Mediterranean fishing grounds
Source: Gli attrezzi pelageci Ministry of Merchant Shipping. 1991;

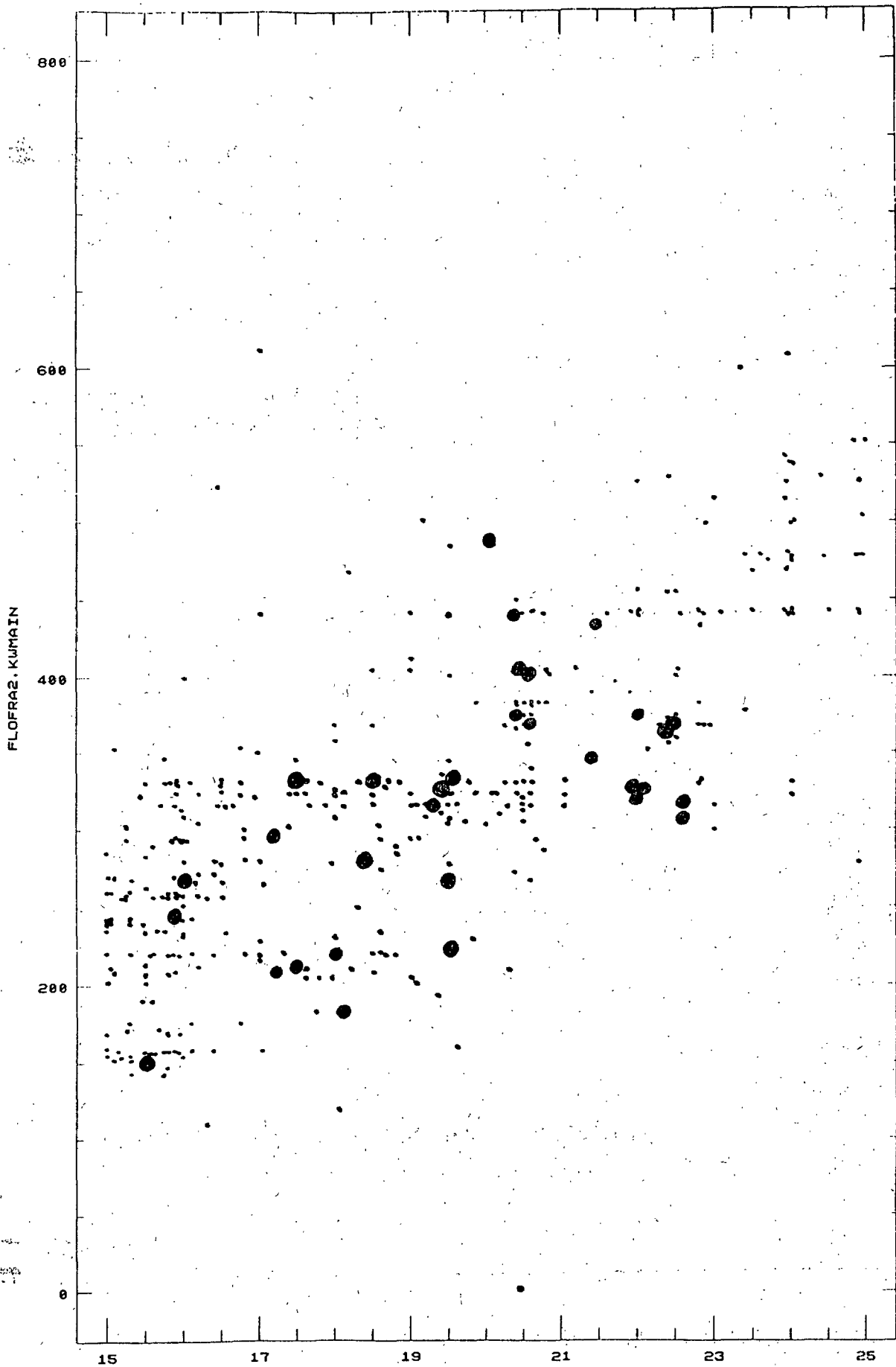


Figure 7: Power and length of vessels covered by derogation compared with those of all French vessels in the Channel west Atlantic area from Morlaix to the Spanish frontier (Source: Fleet register)

DOCUMENTS

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