

COMMISSION OF THE EUROPEAN COMMUNITIES

SEC(92) 394 final

Brussels, 6 March 1992

**REPORT ON
MONITORING IMPLEMENTATION
OF THE
COMMON FISHERIES POLICY**

(presented by the Commission)

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REPORT ON

MONITORING IMPLEMENTATION OF THE COMMON FISHERIES POLICY

The common fisheries policy, which, for economic reasons, is intended to manage rationally a resource which is a common heritage, necessarily involves the application of rules. Fishermen are subject to binding Community rules in that they may fish only for certain species, in certain areas, at certain times of the year, with certain types of gear and within certain quantitative limits.

Any fisherman failing to comply with the rules acts in infringement of the rights of his fellow fishermen and against the common heritage. It is therefore crucial for fishermen's activities to be efficiently monitored. This is vital to the success of the common fisheries policy.

1. Basic principles of the organization of fisheries surveillance in the Community

1.1 General

Conservation of fishery resources is subject to rules adopted at Community level. When these were first adopted, the question arose as to whether, and to what extent, the monitoring of fishing should be entrusted to the national authorities.

The following factors had to be taken into account:

- the legal means (e.g. penalties) and material resources at the disposal of the national authorities differ from one country to another and this may entail differences in the way fishing activities are monitored and in the prosecution of infringements;
- each Member State monitoring fisheries in its waters may tend to discriminate between its own fishermen and those of other Community countries or non-member countries.

Against this background, the idea of a European team of fishery inspectors seemed fairly attractive but the following points had to be taken into consideration:

- almost all the member countries already had fishery inspection services;
- these services exercise sovereign rights, including the right to apply penalties;
- centralized services, especially for an area as vast as the Community, are difficult to organize and manage.

Consequently, the solution adopted by the Community in the context of the common fisheries policy was that monitoring would be the responsibility of the Member States, but would be subject to checks by the Commission.

1.2 Basic legislation

Under the basic Regulation on fisheries control, adopted by the Council on 2 June 1982, consolidated in Regulation (EEC) No 2241/87¹ and amended by Regulation (EEC) No 3483/88:²

- as a basic principle, it is the prime responsibility of each Member State to monitor fishing in its maritime waters as well as in its territory, and related activities by all fishing vessels, including those from non-member countries; in order to ensure an inspection service as efficient and economical as possible, the Member States should co-ordinate their control activities;
- the Commission has the power to carry out checks, at sea and in fishing ports, on monitoring by national authorities of the application of the common policy on conservation, including rules on the TAC system and quotas, technical conservation measures, fishing agreements with non-member countries and international conventions.

1 OJ No L 207, 29.7.1987, p. 1.

2 OJ No L 306, 11.11.1988, p. 2.

The Commission also has the power to seek information from the Member States regarding implementation of the regulation and, where irregularities are suspected, to require national authorities to carry out administrative investigations with the participation of Commission officials;

- the uptake of TACs and quotas is subject to a monitoring system under which fishermen are obliged, while they are at sea, to record in a Community logbook, at least daily, the area in which they are fishing and the quantities caught and then to declare the exact quantities landed.

It should be noted that Community control measures, in particular the obligation to record catches, apply to all stocks subject to quantity restrictions (TACs or quotas), without regard to where the catch is made, whether it is made in international waters,¹ or in third country waters.

The Member States are under an obligation to halt fishing as soon as a quota is used up. The Commission confirms the decision by a Regulation which makes this ban obligatory throughout the Community so that the other Member States can check that the cessation of fishing is complied with; the Commission too, acting on its own initiative and on the basis of information available, may close a fishery when a quota or TAC is used up.

The legislation on control arrangements in Community waters has gradually made more stringent, on the Commission's initiative and with Parliament's support. Although the basic principle of subsidiarity, i.e. decentralization to Member State level, remains intact, the Commission's monitoring powers have increased, particularly as regards the stopping of fishing on the basis of its own information - Article 11(3) of Regulation (EEC) No 2241/87.

1 Case C-258/89 Commission v Spain.

Furthermore, in the management of catch quotas, the Commission has been entrusted with implementing a new procedure (subject to consultation of the Management Committee) for compensating damages suffered by fishermen who, when a fishery is closed as a result of complete uptake of a TAC, have not been able to fish their full quota because of overfishing by another Member State. Finally, the control in respect of quotas is the joint responsibility of the Member States, in particular the vessels' flag State, and the Member State where landings are made.

1.3 Financial solidarity

The decentralization to Member State level of responsibility for fisheries surveillance was accompanied, from the start, by measures to share the attendant costs. These costs differ substantially from one Member State to another because of differences in economic situation and in the extent of areas to be monitored. The first move towards cost sharing was made in 1978 to help Ireland and Denmark (Greenland),¹ after which contributions to assist all the Member States were agreed in 1987 (ECU 22 million)² and 1989 (ECU 110 million over five years)³ to develop monitoring systems in the Member States. The latest decision also covers surveillance in the Mediterranean.

The allocation of financial contributions to the various Member States for the development of surveillance is shown in Annex I (Tables I and II).

2. PRACTICAL ORGANIZATION

2.1 National inspectorates

2.1.1 Organization

Each Member State organizes the surveillance arrangements in its territory and in its waters, with the means at its disposal. Under the Convention on the Law of the Sea, it also has the right to monitor its own vessels in international waters.

1 Council Decision 78/640/EEC.

2 Council Decisions 87/278/EEC and 87/279/EEC.

3 Council Decision 89/631/EEC.

Systems of organization differ considerably from one Member State to another. Some have inspection services dedicated specifically to fisheries activities; others call on several different government departments which also perform functions other than fisheries surveillance.

The results range from a comparatively well-organized service using well-qualified staff in some areas of the Community to one which, because of the range of duties and assortment of staff, is totally inadequate or concerned only with "foreign" vessels.

The slackness of some authorities' inspection arrangements leads fishermen to regard the technical constraints on fishing as derisory and requiring compliance only by others.

In most Member States, the material resources reveal technical shortcomings as regards both equipment and organization arising from the fact that their staff are required to carry out national defence and maritime security duties as well as fisheries inspections.

Several Member States have no airborne surveillance, which considerably reduces the effectiveness of inspections at sea. However, some have recently used Community assistance to improve equipment, particularly in the fields of communications and computerization.

Annex II shows for each Member State how inspections are organized, the staff and material resources deployed and the main shortcomings detected.

The results of this are as follows:

Land-based inspections

The number of inspectors at each port differs substantially from one Member State to another: for example in the Netherlands, Denmark and the United Kingdom there are a number of inspectors at each fishing port while in Spain, Ireland and France a single inspector is responsible for a number of ports.

The inadequacy of the resources available for inspections in the ports of some Member States raises doubts as to whether rules on the conservation of resources are being properly observed there. Furthermore, the lack of uniformity in the way these rules are applied engenders economic distortions between fishermen in different places.

Sea-based inspections

In general the seagoing and airborne resources employed to inspect fisheries areas are inadequate for the extent of the areas to be inspected. The size of their fishing grounds makes this problem particularly acute in certain Member States

Finally, although the data in Annex II should be considered in the light of a number of factors, such as the specific features of the different fisheries, the internal organization of national inspection services and the technical characteristics of inspection vessels, it nevertheless remains true that the level of inspection is inadequate and varies considerably from one Member State to another. Alignment with best practice is essential if the common fisheries policy is to remain credible and successful.

2.1.2 Inspections undertaken

Pursuant to Regulation (EEC) No 3561/85,⁴ the Commission receives each year information on inspections carried out at sea and in the ports of the Member States. Annex III contains statistics for 1990 based on the information received from the Member States.

These show that:

(a) inspections at sea:

- the inspection services of the Member States undertook 12 970 days of inspection in Community waters;
- more than 20 500 inspections of vessels were carried out and infringements detected in over 2 393 cases (about 12%);
- most infringements concerned failure to respect technical measures: prohibited gear, fishing in forbidden areas, fishing without a licence and failure to record catches (logbooks);

(b) inspections in ports led to detection of more than 2 600 infringements, mostly concerning recording of catches and the landing of under-sized fish;

(c) appeals to the courts were lodged in only a comparatively small number of cases of infringement. Many infringements were not pursued.

These figures should be interpreted with some caution:

- the number of days of inspection is probably over-stated since some inspection vessels are not concerned solely with fisheries inspection work;

4 OJ No L 339, 18.12.1985, p. 29.

- the high percentage of infringements detected is probably due to the inspection authorities concentrating their efforts on vessels likely not to have complied with the rules.

2.2 Community inspection

Since 1983, there has been a special department for fisheries control, inspection and licences in the Commission's Directorate-General for Fisheries. Its task is to develop and administer the Community policy on fisheries control. In 1983 the department had a staff of 15, including 7 inspectors; the present staff now exceeds 40, including 19 inspectors.

The Commission inspectors are recruited primarily from civil and military national inspection services, under contracts for a maximum of five years. This limited period of service with the Commission permits the inspectors to apply the experience gained with the Community when they return to their national administrations.

The tasks of the inspectors fall mainly under one of two headings:

- checking the work of the national inspection authorities;
- direct inspection of fishing activities in the NAFO and CCAMLR areas.

2.2.1 Checking the work of the national inspection authorities

The inspectors carry out tours of duty, generally lasting two weeks, in Member States. They work in teams of two, and never in their own Member States. It has happened that these tours have had to be extended, sometimes for several months, in order to carry out proper checks.

The inspectors visit the fishing ports and travel on the surveillance vessels (and aircraft) of Member States. They themselves do not carry out direct inspections but accompany national inspectors to check that the latter are monitoring correctly the enforcement of the Community's own conservation rules, both in Community waters and in international waters subject to quantitative restrictions (TACs and quotas), and of fishing agreements with non-member countries and international conventions. The inspectors also carry out checks within national inspectorates, particularly the departments handling catch data.

Inspection tours are subject to several determining factors: fishing seasons, specific fleets, shortcomings of one or another Member State, etc. Although the Commission has the right to be present in fishing ports to verify the national authorities inspection operations it tries, in accordance with the procedure foreseen in Regulation 2241/87, to agree, insofar as is possible, an inspection programme with the inspection service of the Member State concerned, one or two weeks in advance. In some cases, especially where irregularities are suspected (for example, false statements of landings which have to be checked further), the advance notice is much shorter.

The confidential reports drawn up by the inspectors are used by the Commission to exert appropriate administrative pressure where irregularities are detected and as a basis for compiling infringement dossiers under the procedure provided for in Article 169 of the Treaty. These reports are admissible by the Court as evidence.⁵ It is mainly the work of the inspectors that has given the Commission a thorough knowledge of the realities of the Community fishing industry and it has also made a substantial contribution to the comments contained in parts 3 and 4 of this Report.

The table in Annex IIIa shows the inspections carried out by Community staff in recent years.

5 Case C-64/88 Commission v French Republic.

2.2.2 Inspections in NAFO and CCAMLR waters

Since 1988,⁶ inspections have been extended to the waters of the North West Atlantic Fisheries Organization (NAFO) under the common inspection programme in which the Community and other contracting parties take part (Canada, Japan, etc.). In these waters, the Commission effects through the Community inspectors a common international inspection programme. These can be designated by the Commission or by a Member State. The inspectors appointed by the Commission carry out direct inspections and furthermore, the Member States can designate their own inspectors. To this end, the Commission organizes inspection voyages every year aboard vessels which it charters directly or which are placed at its disposal by a Member State, subject to some financial contribution from the Community. In 1991 Commission inspectors carried out inspections in these waters lasting seven months on a vessel chartered by the Commission. They also spent a number of weeks on an inspection vessel belonging to a Member State.

The purpose of inspections in the NAFO area is to check on the application of NAFO rules by the vessels of the various contracting parties and to check the application of specific Community rules by Community vessels in the waters in question. The Commission notifies the Secretariat General of NAFO and, in some cases, the Member States and other contracting parties of the findings of these inspection voyages and contacts national administrations to ensure that presumed infringements are properly followed up.

Despite the fact that the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) has duly adopted a monitoring and inspection system for Antarctic waters and the Council has applied this system to the Community,⁷ Community inspectors have not yet carried out inspections in these waters, mainly because Community vessels are still not very active there.

6 Regulation (EEC) No 2868/88, 16.1.1988, OJ No L 257, 17.9.1988, p. 20.

7 Regulation (EEC) No 3943/90, 19.10.1990, OJ No L 379, 31.12.1990, p. 45.

3. Operations to ensure compliance with conservation measures

The rules on TACs and quotas and those laying down technical conservation measures (mesh sizes and fishing bans in certain areas) are, in themselves, difficult to enforce because of the great diversity of the fishing industry, the extent of the waters to be monitored, the mobility of fishermen, the mixed nature of the fisheries and the inevitable complexity of the legislation.

Fishermen often dispute the justification for conservation measures and their recalcitrant attitude often extends to the authorities responsible for enforcing the measures. In addition, fishermen are extremely sensitive on the question of uniform enforcement of Community measures throughout the Community. Such uniformity is extremely difficult to achieve, mainly because the inspection system is a national responsibility.

The monitoring task is also made much more arduous by the fact that fleet capacity greatly exceeds available fishing opportunities.

3.1 Compliance with TACs and quotas

Overall, compliance with TACs and quotas is extremely poor. As they have done now for several decades, scientific working parties have made realistic estimates of catches independent of official figures. These show considerable discrepancies, ranging up to 60%, between "official" and "actual" catches. The problem is not limited to certain stocks nor to a single region. It affects all sectors and takes a wide variety of forms, even that of over-declarations, as happens when a Member State fears a reduction in its entitlements if it admits too low a level of catches. Over-declaration may also result from a false certification of origin of catches, so that the under declaration of one catch is matched by over-declaration of another.

The Commission has made regular use of its power to close a fishery on the basis of information that a Member State has exhausted its quota. However, the Commission has no direct access to vessels' logbooks. The Member States use them only to determine fishing zones while the information they contain could constitute a valuable source of data.

All too often the Member States regard quotas as minimum quantities to be achieved rather than as maximum quantities not to be exceeded. National legislation is generally designed to enable fishermen to make full use of quotas but often lacks provisions to prevent over-fishing. Under existing Community legislation, over-fishing of a quota by a Member State cannot be sanctioned unless another Member State suffers damage as a result, that is, if over-fishing results in a TAC being reached before all the quotas are exhausted. Furthermore, no aid for withdrawal from the market is paid in respect of quantities fished in excess of a quota.

It would nevertheless be appropriate to extend the legislation so that a Member State could be sanctioned irrespective of whether another had suffered harm. The Court of Justice has stated several times that the Member States, in every circumstance, must take any measures necessary to prevent over-fishing of quotas. In principle all over-fishing should be sanctioned. However, if this were done, there would have to be provisions to dissuade Member States from making false declarations.

3.2 Recording and notification of catches

Existing Community legislation on the monitoring and recording of catches is not always applied with the vigour required to ensure complete records of catches and their correct communication to the Commission.

There are also shortcomings as regards the monitoring of catches transported by lorry to the place of sale or processing factory, or exported direct. In such cases, if there is no inspection at the point of landing, products disappear into the marketing circuit and their origin can no longer be ascertained.

Commercial transactions are constantly expanding and the prospect of the abolition of controls at the Community's internal frontiers means that Community and national legislation must be tightened up. Legislation should provide for "integrated controls", that is, from the producer to the consumer (see para. 4.5).

It appears that certain Member States deliberately delay transmitting catch data to the Commission in order to delay closure of a fishery where a quota is exhausted. Annex IV lists delays in transmission by Member State. It is obvious that this practice must be fought as vigorously as possible. The Commission considers that, where it detects repeated delays in the transmission of data, it should have the power to close the fishery.

3.3 Meshes and minimum sizes

There is also a very low level of compliance with the legislation on meshes and minimum sizes. Although some fleets comply with remarkable correctness, this is certainly not the rule. Available estimates of catches of small fish are damning. They show that in certain areas the selectivity of many trawl cod-ends does not in any way correspond to what should result from legal mesh sizes. A combination of inadequate inspections and the shortcomings of Regulation (EEC) No 3094/86 has largely encouraged these infringements.

It is easy to use mesh sizes permitted by derogation for other, illicit purposes and make use of devices which prevent the vast bulk of small fish from escaping. Fraudulent catches, consisting mainly of fish smaller than the minimum size, have no difficulty in finding purchasers. This demonstrates the extent to which minimum sizes are being ignored. In some cases, fishing for juveniles in this way has increased since introduction of the CFP.

3.4 Boxes and internal licences

The system of boxes appears to have been much better respected, probably because it is easier to check on the position of a fishing vessel than on its meshes and catches. The positive impact of the Norway pout, mackerel and North Sea plaice boxes has been demonstrated in a number of studies.

The licensing system within the Community has been managed in a satisfactory fashion but on-the-spot inspections have led to varying results.

The situation in the Shetland box, which uses both licences and a box, is satisfactory. This area has undoubtedly benefited from the declining interest in the sector of certain fleets. Transmission of data could be improved but an effective management tool has been established.

There are problems in undertaking on-the-spot inspections under the Act of Accession of Spain and Portugal, since some fishermen use quite sophisticated techniques to escape inspection and penalties. Better coordination between the responsible authorities of the countries concerned could put an end to these practices.

3.5 External resources and monitoring

As regards the external licensing scheme (waters of non-member countries), while the issuing of licences under the agreements has been satisfactory, "partner" countries have constantly deplored failures by Community vessels to comply with the rules.

It is difficult to assess to what extent these accusations are justified but it is true that logbooks, to deal only with this aspect, have often been completed with a degree of carelessness, and sometimes the information they contain is manifestly false. Hence it has proved impossible to use the information available to introduce validation tests.

Fisheries in the NAFO zone are a special but important case. The Commission has devoted considerable resources to monitoring activities in this zone, sometimes at the expense of monitoring in other fields or areas since its staff and financial and material resources are limited.

Where the resources required have been deployed in the NAFO zone, considerable progress as regards inspections at sea has been achieved. The effectiveness of Community inspectors has made it possible to exercise a great deal of pressure to ensure compliance with technical measures and the keeping of logbooks. Some doubts still persist, however, about the actual total catches of certain fleets and to deal with this problem it has been decided to step up inspections both at sea and at the point of landing.

The recently adopted systems, notably the "hail system", under which vessels will be required to indicate their entry into and departure from each fisheries sector, as is done now in the Shetland box, as well as the aerial surveillance system, will constitute a considerable advance.

4. Major shortcomings in the implementation of inspection legislation

4.1 Inherent difficulties

While inspection poses considerable problems for the CFP, these should be kept in perspective by remembering that they are encountered by all fishery management policies. All studies agree that the root of the problem is the fact that resources are not private property. There is a constant tension between the individual short-term interest and the collective long-term interest. The fisherman's immediate personal interest is in catching the greatest possible quantity of fish, large or small, provided they are marketable. Taken together, the logic pursued by many individuals leads in the end to the classical aberrations of overfishing and mismanagement.

Rules must be introduced to safeguard the long-term collective interest. Fishermen would then be faced with a choice between respecting the rules, and forgoing profit, and what they perceive as their own interest, which would induce them to consider fraud.

This "objective" analysis is complicated by both psychological and cultural factors. In the best of cases, the fisherman wishes to act correctly; in the worst, fraud becomes acceptable, or even admired within the peer group.

The two objective factors on which everything depends are the probability of inspection and the dissuasive nature of penalties.

4.2 Lack of inspection resources and dissuasive penalties

4.2.1 Inspections

To increase the probability of a penalty, the means for carrying out inspections at sea or on land must first be expanded. These means must be adequate in both quantity and quality, employ sufficiently modern techniques and trained staff and offer a clear operational organization pursuing a well defined strategy. The elements of an infringement detected must also be strong enough legally for a case to stand up in court. The pre-requisites are therefore complex and cannot be introduced as quickly as would be desirable. The CFP faces a special difficulty in that these control duties are shared between the Member States and the Commission. Even in what appear to be simpler cases, coming under the responsibility of a single country, very thorough studies have revealed how much still remains to be done. It has been shown (by Sutinen et al., 1990) that fraud in fisheries managed by the United States federal authorities was highly lucrative and generated profits exceeding the penalties. In the George Bank fishery, illegal landings range from 11% to 25% of catches; the fishermen regularly committing infringements make up between 25% and 49% of the fishing population.

The material resources for monitoring on land have been gradually modernized and computerized in some Member States, although quayside inspections are still clearly inadequate. Despite financial assistance from the Community, many vessels used for fisheries surveillance are insufficiently or unsuitably equipped, while airborne surveillance is inadequate.

To make best use of the existing resources in the Member States, the following two management and control monitoring instruments should be considered:

- automatic communication of positions and movements of fishing vessels operating in the waters of the Member States;
- a licensing system which would restrict the fishing effort by zone and by fishery. Besides locating vessels, this would provide an effective penalty (withdrawal of the licence) and would be the best way of limiting the overcapacity in the fleet which in certain cases lies behind infringements of conservation measures.

The Commission is also exploring the possibility of using new technologies to improve fisheries surveillance. These should permit the immediate and automatic remote identification and location of vessels by satellite, so improving both surveillance and safety. A pilot surveillance system of this kind, partly financed by the Community, is at present being tried out in Portugal.

Detailed information about what has been achieved in this field may be found in Annex V.

4.2.2 Penalties

Unless substantial and very costly resources for inspections at sea can be developed quickly, it seems very difficult to ensure that an isolated infringement is very likely to attract a penalty. To compensate, the severity of the penalty should be increased.

In fisheries managed by the fishermen themselves, this severity may reach a very high degree, through the withdrawal of licences. Obviously this can be done only where access to fishing is not free but subject to a licensing or similar system. If administrative penalties cannot be imposed or are not sufficient, the procedure makes provision for the alleged offender to be brought before a court. Experience shows that penalties are often very light. This raises the question of whether judges in many Member States are sufficiently aware of what is at stake or whether they do not tend to view the fisherman as the wretched victim of absurd and technocratic regulations. In effect, the decisions of the jurisdictions are not always dissuasive. Legal texts are sometimes interpreted in such a way that courts add an extra safety margin to the tolerances explicitly allowed. As in the American example quoted above, fines are paltry compared with the profits to be secured by fraud. Frequently, the most dissuasive factor remains the immobilization of the vessel for inspection purposes.

It is true that the prospect of a penalty is so remote that, if the system is to act as a deterrent, its severity would have to be increased to such an extent that those "unfortunate" enough to be sentenced could feel unfairly treated.

A Community policy imposing limitations and constraints on the activities of those involved and sometimes going so far as to undermine their short-term economic and financial interests cannot be credible, and therefore acceptable, unless the sanctioning of infringements is equitable, which does not seem to be the case at present (see Annex VI).

However, it is clear that harmonization of judicial procedures, fines and other penalties across the Community is at present a very difficult political goal. Action should therefore be taken to remove the economic incentive to commit infringements by reducing demand for the products of illegal operations and by imposing financially dissuasive penalties on infringements detected.

This could entail financing campaigns to increase awareness among both producers and consumers by publicizing the damage caused to resources by failure to respect legislation, e.g. by using nets with excessively small mesh sizes, which leads to under-sized fish being landed. It must also be ensured that at least the whole economic profit derived from the infringement is clawed back. This principle has been accepted in certain cases of infringement (Article 11(3) of Regulation (EEC) No 2241/87).

Even the possibility of incorporating into Community legislation the right for the Commission to refuse aid or grants to authorities or organizations which systematically fail to ensure compliance with the law should be considered.

In general terms, it would be desirable for the Commission to be able to utilise sanctions against those operators who do not respect those Community regulations in force.

4.3 Lack of political commitment

The commitment of the political authorities to the monitoring of enforcement is crucial to the success of the policy. However, commitment is lacking in several Member States, a number of which, for example, fail to apply national measures which are more severe than those laid down by Community legislation in situations where this is required for inspections to be effective. Consequently the administrations responsible for monitoring are insufficiently motivated and equipped.

4.4 Practical difficulties besetting Community inspection

The Community legislation entrusts Commission inspectors not with the role of monitoring fishing directly (except in the NAFO and CCAMLR areas) but with the task of ensuring on the spot that national administrations are discharging their fisheries surveillance duties in accordance with Community rules.

Since the common policy was first introduced, some Member States have been reluctant to accept Community checks, especially those carried out on the spot by Commission officials. In addition, in several Member States visits by Community inspectors are known of in advance, resulting in these control operations losing any effectiveness.

The attitude of most of the Member States is explained by their concern to retain sovereignty. The basic rules on monitoring, and subsequent reinforcements proposed by the Commission, were the subject of lengthy and detailed discussions at Council level (Ministers for Fisheries). Hence the Member States have always reserved the right to reject an inspection programme proposed by the Commission. Although inspection programmes are drawn up by mutual agreement, it has happened on occasion that Community inspectors have been unable to operate in a region where an inspection should have taken place because of the lack of cooperation from the national authorities. The Commission considers that in such cases it should have the right to impose, under its own responsibility, an inspection in those ports where it considers this should be done. In conclusion, to avoid any inconvenience, it should be indicated that the Commission should be able to organise, autonomously, inspection missions without prejudice to the powers of the national inspection services.

4.5 Lack of an overall approach to inspection in the common fisheries policy

The scope of the inspection regulation is limited to checks on the policy on conservation of resources. This means that Community inspectors are unable to check compliance with market organization rules and measures for implementing the structural policy. The current situation is paradoxical; in a region where fishermen, or an organization of fishermen, systematically fail to respect certain conservation measures, they continue to receive grants under the market regulations or the structural policy because of the lack of any overall monitoring of all aspects of the common fisheries policy.

4.6 Lack of coordination between the various inspection bodies

In most Member States, inspections at sea, in ports and after first sale are the responsibility of different authorities, often with no effective coordination. This situation results in a dissipation of the inspection effort and sometimes prevents action being taken against an infringement because it is impossible to assemble the evidence sufficiently quickly.

Some unauthorized fishing activities, carried out by vessels belonging both to non-member countries and to Community Member States, escape inspection, partly because of the lack of inspection resources, particularly for airborne surveillance, in certain zones of Community waters and because of poor coordination of inspection operations by the various Member States. For example, the Member States have hitherto taken scarcely any steps to organize inspections of their own fishermen fishing in zones belonging to other Member States. Although the United Nations Convention on the Law of the Sea recognizes the right of pursuit, at least under certain conditions, the Member States appear to make no use of this against their own vessels, those of other Member States or those of non-member countries.

It also happens that the facts as recorded by the staff who detect the infringement are not accepted as sufficient evidence before the courts of the Member States responsible for legal proceedings and so no action is taken.

4.7 Lack of information about the grounds for conservation measures

The objective limitations on the inspection and penalty system make the subjective elements of the problem of respect for the rules of vital importance. A fisherman is not constitutionally predisposed to fraud. When he is convinced that a rule is soundly based, he may accept restrictions on his activities. Social pressure from the peer group may also provide a considerable incentive to comply with the rules.

On the other hand, when a rule is seen as being devoid of any justification, those who infringe it enhance their personal standing. Unfortunately, this is the situation within the Community. While the national authorities have formally accepted the CFP and its rules, many groups feel very frustrated. Not only fishermen but sometimes substantial sectors of public opinion regard the existing rules as wrong. Where an infringement is committed these groups take the side of the offender against the administration. In such a context it is difficult to generate a collective desire to improve respect for the rules. Without going so far as to allege complicity, there exist within certain Member States attitudes ranging from slackness, i.e. turning a blind eye to what should be punished, to a one-sided interpretation of the CFP, which regards those aspects which the Member State concerned finds inconvenient as of little importance. While it may be in the interests of the individual fisherman to commit fraud, it may also be in the interests of the Member State to allow certain infringements to go on and the Commission has not so far been able to prevent this.

Without seeking perfection, it is clear that an active information policy would support the rules and inspections. This would explain the bases of the CFP and stress the harm done to the Community as a whole by individual cases of fraud.

5. Conclusions

Now that the Community inspectorate has been in operation for eight years, despite constant pressure on the Member States, implementation of legislation is still subject to serious shortcomings. Any progress that has been made remains far from adequate. However, the experience gained has permitted identification of the most serious gaps and suggested the outline of a strategy for achieving greater progress, which is perfectly attainable if all those concerned, particularly on the political level, demonstrate the necessary will.

While the solution does not appear to lie in direct inspections by the Commission, checks under the aegis of the common fisheries policy should receive a fresh impulse in order to facilitate improvements within the Member States and ensure a uniform spread of effort by combining action by the Community with that by the Member States.

Work is needed to ensure better implementation of all the existing management instruments:

- TACs and quotas;
- technical measures such as mesh sizes and minimum sizes;
- boxes;
- licences.

A national monitoring scheme supervised by the Community authority should be based on the following principles:

1. A Community authority with autonomous inspection powers.
2. A global, integrated control policy covering all aspects of the common fisheries policy, with particular attention to conservation measures, structural and market aspects, and applying itself to all operations within the fisheries network.
3. Surveillance of the activities of all fishing vessels in the maritime waters of the Community, as well as all vessels flying the flag of a Member State in third-country or international waters, and of all landings and transshipments on Community territory.

These principles could be put into operation by means of;

- Use of modern communications and data-processing technology.
- Use of effective monitoring instruments: automatic communication of movements and positions of vessels, generalized licensing system.
- A system of minimum penalties to apply in all the Member States, backed up by a system of Community penalties.

The aim of the proposed improvements to the inspection system should be to bring the level of inspections up to the best current practice as regards technical, legal, economic, sociological and operational aspects.

5.1 On the technical level, the incorporation of modern techniques would make inspections simpler, more effective and less expensive.

Satellite techniques are both the preferred and the most satisfactory solution for locating vessels and for ensuring safety at sea. Use of these modern techniques with introduction of a system for the automatic notification of the positions and movements of vessels and a generalized licensing system would make the best use of the monitoring resources currently available in the Member States. The Community should therefore secure all the resources necessary for introduction and promotion of these techniques.

Computerization should also be strengthened and should apply to a very large number of operations, both on-board (e.g. electronic logbook) and in ports (records of landings), so providing the Commission with an increasing flow of data and requests in electronic form enabling it to recover data provided by different sources. The Commission should secure the management, interrogation and processing instruments it needs for closer monitoring of fisheries, including in particular real-time estimates of the state of exhaustion of quotas. At the same time, the Member States too should make greater efforts with regard both to new techniques and to the upgrading of traditional equipment (vessels and surveillance aircraft).

5.2 On the legal front, the Community administration should have greater real freedom and scope in carrying out inspections in the Member States. It should have greater autonomy from national administrations so that the Commission has the freedom to organize inspection missions. Inspectors should also have responsibility for monitoring structural measures, particularly those concerning reductions in the capacity of the fishing fleet, and the markets in order to establish a global perspective of the integrated application of the Common Fisheries Policy.

Implementation of technical measures should be assisted by more clearly defined responsibilities for all those engaged in the fish trade (producers, hauliers, buyers and merchants). This would enable action to be taken against the markets in under-sized fish which are currently flourishing and take account of the development of transport from one Member State to another before first sale. Furthermore, if the powers of professional organizations are extended, their responsibilities where the rules have not been observed should also be clarified. One could envisage, for example, a scheme for sanctioning such organizations, notably by reductions in quotas where infringements were detected.

The range of administrative and criminal penalties available to the Member States should be modernized and, where possible, harmonized.

Modernization should include speedier legal and/or administrative proceedings so that, subject to certain conditions, a vessel which had been apprehended could leave the port very shortly afterwards.

Harmonization should also be achieved through introduction of a system of minimum penalties for each category of infringement to apply in all the Member States. The minimum penalty should at least be as great as the economic or financial gain generated by the infringement. Penalties should also be graduated, ranging from seizure of banned gear and catches, withdrawal of licence, or temporary seizure of the vessel to, in the most serious cases, permanent withdrawal of the master's ticket.

There should also be a system of Community penalties applying to all activities (relevant to Community competence).

Court judgments should be scrutinized to assess the end-result of the monitoring provisions, and in particular their dissuasive effect. At the same time, there should be a means of penalizing Member States which have not honoured their obligations; for example, the exceeding of quotas and delays in the transmission to the Commission of data on landings should attract sanctions.

- 5.3 Economic assistance should be more closely linked to respect for the inspection regulations. The attribution of aid and grants should be dependent on compliance with legislation so that those carrying out systematic fraud would receive no financial aid from the Community. The Community authority should have greater powers in this regard.

Aid should continue to be provided to promote development of inspection instruments, particularly new techniques.

- 5.4 The sociological dimension of progress should have two elements: the search for support in professional organizations to promote greater discipline and the preparation of an information policy about what fraud really entails. This information should be aimed at those engaged in fishing and at the general public, administrations responsible for inspections, and the legal profession.

5.5 At operational level, the Commission should strengthen its links with all national administrations and increase its coordinating role among the Member States. Coordination, sometimes between departments in the same Member State, will be of major importance in the years to come. This is true both of inspections on land, where difficulties will be increased by the single market, and at sea, where inspections and the "right" of pursuit in waters under the jurisdiction of another Member State (outside territorial waters) should be exploited and organized irrespective of the flag under which the vessel is sailing.

It would be desirable to set up a committee for the monitoring of the common fisheries policy, in which all problems relating to the monitoring of the CFP would be discussed, and which would facilitate this coordination. The committee could also be asked to give its opinion on any Commission decision to impose penalties on Member States or professional organizations.

A programme for the training of national inspectors should also be drawn up with the Member States. This would include time spent with the Commission and in the Member States so that decisions taken at Community level concerning the evolution of the CFP would be well known to and understood by those responsible for ensuring that they are respected. It would also provide inspection staff with a Community view of how inspections are carried out.

The Commission would be able to make best possible use of its limited staff if a plan of action were drawn up. While some resources would have to be allocated to routine activities concerning the monitoring of inspection in the Member States, most of those available would work on specific cases regarded as of particular moment for the future of the CFP.

Each case identified would be subject to sustained scrutiny until a solution was achieved and all necessary means of applying pressure would be used.

The shortcomings which remain and the obstacles encountered should not distract attention from the progress which has been made. Provided the political will is forthcoming and there is a general awareness of what is required, the further progress on inspection which is needed can be achieved rapidly. This will enable the common fisheries policy to attain those objectives which have so far remained beyond its grasp but which appear realistic in the light of experience.

The table below sets out in detail the shortcomings identified in implementation of the common fisheries policy and the improvements contemplated.

In the months to come, the Commission will be tabling proposals for the amendment and improvement of Community rules along the lines set out above.

S U M M A R Y T A B L E

**SHORTCOMINGS IN MONITORING IMPLEMENTATION
OF THE COMMON FISHERIES POLICY**

PROPOSED IMPROVEMENTS

**1. SHORTCOMINGS IN THE IMPLEMENTATION OF EXISTING
LEGISLATION**

A. Sea-based inspections

- | | |
|--|--|
| <ul style="list-style-type: none">- Lack of coordination between inspection departments in the Member States
- Inadequate monitoring of access to fishing zones.
- Lack of coordination between the Member States in pursuing infringements. | <ul style="list-style-type: none">- Introduction of regular multilateral meetings between national inspection departments under the auspices of the Commission (exchange of information, coordination surveillance missions).- Establishment of an inspections committee chaired by the Commission.- Use of new monitoring techniques (e.g. computer networks, satellites).
- Introduction of a licensing system and Community arrangements for movements applicable to all vessels flying the flag of a Member State and fishing in Community waters.
- Undertaking by the Member States to use their right of pursuit (Article 111 of the Convention on the Law of the Sea).- Mutual recognition that the flag State may inspect its vessels in the waters of another Member State. |
|--|--|

- Inadequate staff and resources in the Member States allocated to inspection duties.
- Under-declaration of catches in the logbook.
- Failure to use catch data in the logbook.
- Inadequate checks that mesh sizes comply with the rules.
- No means of inspecting fishing vessels flying the flag of a non-member country in Community waters.
- Community financial assistance for expenditure on the modernization of national inspection departments (continuation of existing policy).
- Reduction in the tolerance margin allowed.
- Amendment of Regulation (EEC) No 2807/83 ("logbook Regulation"):
 - . compulsory transmission of logbook data to the Commission by computer.
- Compulsory single mesh size for certain protected fishing zones.
- Compulsory seizure of prohibited gear.
- Introduction of a system for the compulsory communication of movements and of catches held on board such vessels.
- New provisions for landing and transshipment declarations for such vessels.

B. Land-based inspections.

- Inadequate checks on the recording of landings and transshipments.
- Compulsory cross checks (by the inspecting authorities) of landings statements against sales documents.
- Regular spot checks of catch data transmitted to the Commission.
- Obligation on the Member States to include the results of checks in the data transmitted.
- Notification of catch data to the Commission by computer to permit real-time management.

- Failure to record catches in waters of non-member countries.
- Non-compliance by the Member States with regard to the closure of fisheries:
 - . Late adoption of national measures to prevent the exhaustion of quotas (provisional closure of fishery);
 - . Inadequate national measures to comply with a Commission ban on fishing;
- Failure by producers to respect bans on fishing (fishing without a quota).
- Inadequate inspections and penalties for the landing of under-sized fish.
- Obligation on the Member States to record and transmit to the Commission landings under fisheries agreements with non-member countries.
 - . Provisional closure of fishery by the Commission on the basis of available information where the Member State fails to act;
 - . Systematic withdrawal of EAGGF aid (withdrawal price scheme) for quantities fished in excess of quotas;
 - . Adoption of measures for the appropriate disposal "of quantities fished in excess of quotas" (e.g. deductions from the current or subsequent years), including a co-efficient of penalisation;
- Introduction of dissuasive penalties:
 - . Temporary laying-up of vessel in proportion to the seriousness of the infringement, temporary suspension of the tickets of convicted owner-masters, withdrawal of licence;
 - . Seizure of proceeds from the sale of quantities fished in excess of quotas.
- More thorough inspections of catches landed in ports or landing stages where these practices are current.
- Dissuasive penalties for offenders (e.g. systematic seizure).
- Withdrawal of Community aid for non-compliance with technical measures; penalties for producers' organizations whose members land under-sized fish.
- Closure of certain fisheries where catches contain too many under-sized fish.

- Delay in transmission to the Commission of data on landings.
- Lack of checks on quantities landed and transported to points of sale.
- Compulsory notification to the Commission of quota utilization estimates.
- Provisional ban on fishing issued by the Commission where a Member State systematically fails to respect the notification procedure.
- All fish transported to points of sale to be accompanied by statement of the origin of the products (name of vessel, fishing zone etc.).
- Register to be kept by the vessel's agent showing quantities landed, place of landing, origin of quantities landed and destination (place of marketing).
- Landings in places not subject to inspection to be subject to conditions; immediate notification of quantities landed to the flag state.
- Register to be kept by the inspecting authorities showing the number of inspections carried out on land.

2. GAPS IN LEGAL INSTRUMENTS.

- Lack of independence of Community inspectors.
- Greater powers for Community inspectors including:
 - . powers for the Commission to draw up inspection programmes on its own initiative;
 - . possibility of amending an inspection programme to include checks found to be necessary on the spot;
 - . greater powers for Community inspectors with regard to structural and markets aspects (general and integrated inspections).

- Inadequate penalties disproportionate to the commercial gain from the infringement.
- Length of legal proceedings (delays in securing convictions for fraud reduce their deterrent effect).
- Producers' organizations bear no financial responsibility where conservation measures are not respected.
- Gaps in the procedure for implementing Regulation (EEC) No 3781/85 (penalties for infringement of the access rules laid down by the Act of Accession of Spain and Portugal).
- Introduction of a "harmonized" and "graduated" system of national penalties, including:
 - . minimum penalties for each type of infringement;
 - . temporary laying up or suspension of the national licence;
 - . permanent ban or withdrawal of national licence;
 - . withdrawal of master's ticket.
- Introduction of "Community penalties" for vessels under Community licences and for operations subject to Community approval.
- Introduction of an accelerated procedure (security and appeal system) in each Member State.
- Financial responsibility on producers' organizations. Financial aid subject to compliance with conservation measures.
- Suspension or clawback of start-up and operating aid to producers' organizations in cases of non-compliance with conservation measures.
- Power for the Commission to withdraw recognition of the PO granted by the Member State.
- Application of these penalties to be approved by the "Inspections Committee".
- Adoption of a Commission regulation laying down implementing rules, e.g. fixed time limit for imposition of the penalty.

3. LACK OF UNDERSTANDING OF CONSERVATION MEASURES.

- **By producers:**
 - . Lack of awareness of the harm caused to fishermen in general, lack of long-term view of the reasons for complying with conservation measures.
 - **By consumers :**
 - . Traditional dietary practices run counter to conservation policy (demand for under-sized fish, e.g. hake).
 - **By judicial bodies:**
 - . Lack of severity in dealing with offenders arising from a failure to understand conservation measures and the need for punishment.
- **Adoption of measures to accompany conservation policy:**
 - . Self-discipline by producers as part of the local management of quotas;
 - . Information campaign on the long-term consequences of fraud;
 - . Financial aid to producers to reduce the costs of the correct implementation of conservation measures (aid for the purchase of new selective fishing gear, etc.).
 - . Campaign to raise awareness of conservation issues.
 - . Information and training for judicial authorities on questions raised by fraud (credibility of the common fisheries policy).

4. LACK OF KNOWLEDGE AND UNDERSTANDING OF THE GUIDELINES OF THE CFP, NO COMMUNITY DIMENSION TO INSPECTION.

- **By national inspectors.**
- Training programmes.
 - Training periods with the Commission and various national departments.

**COMMUNITY CONTRIBUTION TO EXPENDITURE BY THE
MEMBER STATES ON IMPLEMENTATION OF THE RULES CONCERNING THE
CONSERVATION AND MANAGEMENT OF FISHERIES RESOURCES**

Table I
Community contributions to the Member States

	EEC Contribution (ECU million)			
	Council Dec. 87/278/EEC (all MS)	Council Dec. 87/279/EEC (PT)	Council Dec. 89/631/EEC (all MS) 1991 ¹	TOTAL
Belgium				-
Denmark	1.660			1.660
Germany			0.237	0.237
Spain	0.508		4.263	4.770
France	0.720			0.720
Greece			1.391	1.392
Ireland	1.324		5.766	7.090
Netherlands	0.210			0.210
Portugal	1.040	11.500	4.800	17.340
United Kingdom	0.038		2.780	2.818
TOTAL	5.500	11.500	19.237	36.237

¹ Pursuant to Commission Decisions 91/17/EEC and 91/62/EEC.

Table II

Contributions granted under the decisions in force
(87/278/EEC, 87/279/EEC and 89/631/EEC)
as at 31 December 1991

Member State	Amount granted (ECU million)	Payment made (ECU million)
Germany	0.237	-
Denmark	1.660	0.110
Spain	4.770	-
France	0.720	0.060
Greece	1.392	-
Ireland	7.090	5.860
Netherlands	0.210	0.180
Portugal	17.340	7.180
United Kingdom	2.818	0.560
TOTAL :	36.237	13.950

Investments made (at 31 December 1991)

DENMARK:

Equipment for inspection vessels

FRANCE:

Communications and detection system

IRELAND:

Computer equipment (satellite surveillance)

Zodiacs

Surveillance aircraft

NETHERLANDS:

Computer equipment

PORTUGAL:

Five inspection vessels

Computer and detection systems

Modernization of inspection vessels

UNITED KINGDOM:

Communications and transmission systems

Four inspection vessels

In the cases of inspection aircraft and vessels, the payments represent contributions.

BELGIUMOrganization of inspection

The sea fishery directorate of the Ministry of Agriculture is the principal body responsible for the application of Community control arrangements. These are exercised by its inspection department, which has only one full-time inspector. Surveillance and inspection of fishing vessels at sea in Belgium's fishery zone is the responsibility of that directorate and of the Belgian naval authorities (Ministry of Defence) and the Maritime Police (Ministry of Communications and Transport). For the latter two, however, fisheries inspection is only an occasional duty which has to take second place to their main duties; this means that staff do not always have the technical knowledge required.

Summary of Belgian Naval Resources utilized for fishery control

<u>Type</u>	<u>Number</u>	<u>Built</u>	<u>Speed (knots)</u>
Tug	2	1950	10
Minesweeper	1	1950	14
Maritime Police vessels ¹	2		17

Air surveillance

There are no resources dedicated to airborne surveillance of fisheries, but military aircraft may provide information on request during the course of their other duties.

Principal deficiencies at present

The number of inspectors is insufficient to ensure adequate inspections of landings in the ports. The vessels assigned to fishery control have very limited capabilities, being rather old, underpowered and poorly equipped. An attempt is made, subject to their serviceability, to deploy these vessels in rotation during certain seasonal fisheries in the southern North Sea. This results in a certain coverage between March and June and during September and November.

¹ Within the three-mile limit.

However, even though Belgium has a small fishery zone, much of this inspection effort is rendered ineffective because of the unsuitability of the inspection vessels. Outside the periods mentioned, seagoing inspection is irregular and infrequent.

As regards technical conservation measures, there are gaps in the inspection of provisions relating to minimum sizes and the power of beam trawlers.

DENMARK

Organization of Inspection

The Ministry of Fisheries is responsible for all aspects of fisheries control in Denmark through its Sea Fisheries inspectorate. The inspectorate is organized regionally and consists of seven centres, each with between 16 and 36 staff. A total of 145 full-time staff are employed in the ports.

Summary of Danish inspection vessels

<u>Name</u>	<u>Year of building</u>	<u>Length</u>	<u>Gross Tonnage</u>	<u>Speed (knots)</u>
Nordsøen	1967	53 m	475	14
Nordjylland	1967	53 m	475	14
Vestkysten	1987	50 m	500	16
Jens Vaever	1965	30 m	142	10
Havornen	1979	50 m	324	16
Viben	1977	16 m	23	20
Havternen	1975	17 m	31	12

A total of 118 persons are engaged in inspections at sea.

Air surveillance

No means of airborne surveillance of fisheries is employed.

Principal deficiencies at present

The main problem concerns the determination of species during port inspections of catches destined for the production of fishmeal and oil and affects principally by-catches of whiting and herring. Catch declarations for this fishery are often based on unchecked data and the Commission has requested an inquiry.

The coastal fishing fleet in the Skagerrak and Kattegat often makes incorrect declarations of species landed in order to avoid exhaustion of certain quotas or the closure of a fishery by the Commission. Inspections in those areas, particularly of vessels from non-member countries, should be stepped up.

The Danish inspection authorities have at their disposal considerable resources in terms of personnel and equipment for checks at sea, following internal reorganization and financial assistance from the Community. However, three of the seven inspection centres referred to above give priority to rescue operations.

GERMANY

Organization of inspections

Responsibility for the application of Community control arrangements falls to the Federal Ministry of Agriculture in cooperation with the authorities of the Länder Schleswig-Holstein, Niedersachsen, Bremen and Mecklenburg-Vorpommern.

The Länder have a staff of 47 full-time fishery inspectors stationed in the ports.

Surveillance and inspection of fishing activity in the German fishery zone are conducted by vessels of the Federal Ministry of Agriculture and the coastal Länder. Customs (Ministry of Finance) vessels also participate to the extent that their other duties permit.

Summary of inspection vessels

<u>Name</u>	<u>GRT</u>	<u>Length</u>	<u>Max. speed</u> (knots)
Federal government			
Seefalke	1789	app. 80 m	20.0
Meerkatze	1751	app. 77 m	15.5
Frithjof	1637	app. 75 m	15.5
Warnemünde		app. 47 m	18
Länder			
Nimrod	40	19.5 m	18
Nixe	36	17.0 m	12
Eider	140	28.0 m	24
Niobe	30	17.0 m	20
Kieper	30	17.0 m	24
Greif	40	22.0 m	16
Wacht	30	17.5 m	12

In addition a number of small customs vessels undertake fisheries control duties in territorial waters. The Commission noted that the four units used by the federal authorities have appropriate equipment for surveillance missions carried out as part of inspections at sea.

Air surveillance

Fisheries departments may request airborne sighting information from routine flights made by environmental agencies but in practice this facility is rarely used.

Principal deficiencies at present

The efficiency of checks carried out by the "Land" inspection services is hampered by staff shortages.

These vessels also provide assistance to fishing vessels, often outside the German economic zone. Consequently, at certain times of the year the limited range of the vessels of the "Land" inspection services, which tend to operate mainly in the twelve mile zone, makes it impossible to cover the entire area.

Overall, inspections in Germany are effective, a situation assisted by the considerable reduction in catch capacity. Greater vigilance in this respect is now needed following incorporation of the former GDR and recent imports of vessels from other Member States.

SPAIN

Organization of inspections

Under the Ministry of Agriculture, Fisheries and Food the Secretariat-General for Fisheries is responsible for the application of Community control arrangements through a team of 17 full-time inspectors based in Madrid. A further 15 inspectors are being recruited. Fisheries inspectors of the autonomous regional governments and military personnel acting as agents of the Secretariat-General for Fisheries are authorized to carry out inspections in ports but in practice often give priority to other responsibilities. One should also welcome the new willingness to make all interested parties aware of the situation regarding minimum sizes. Furthermore, one of the autonomies (Galicia) has already taken major steps in this direction.

Operational responsibility for fisheries surveillance and control at sea lies with the Spanish defence forces (Navy).

Summary of inspection vessels

<u>Patrol area</u>	<u>No. of vessels</u>	<u>Length</u>	<u>Tonnage</u>	<u>Speed</u> (knots)
Beyond 10 miles	9	30 to 58 m	100 to 400	15 to 30
Out to 60 miles	16	9 to 14 m	5 to 21	18

Air surveillance

Spain does not routinely conduct airborne surveillance. Exceptionally, the Air Force may carry out reconnaissance missions within the 12-mile limit.

Principal deficiencies at present

The imbalance between the capacity of the fleet and fishing opportunities in Community waters, as defined in the Act of Accession, requires a firm and disciplined approach from the inspection authorities. Unfortunately, the lack of coordination between national authorities and those at regional level makes this impossible. Hence fishermen do not generally comply with technical measures. Furthermore, a large number of vessels are still fishing without a licence in the waters of the pre-enlargement Community. The situation could be improved by greater cooperation with the inspection authorities of the other Member States.

Quayside inspection of vessels by the national and regional authorities and checks on catches landed (species, quantities, sizes) are inadequate, as are data entered in landing declarations and logbooks. This means that catch statistics are unreliable, particularly since catches in the ICES division outside the Community zone are often not charged to quotas (particularly monkfish and megrim).

Inspections at sea will have to await modernization of the inspection fleet and the reallocation of responsibilities between national and regional governments.

Cooperation with Commission inspectors could be improved.

One of the major difficulties remains co-ordination between the different competent services, even though simplifications are being made at a national level.

FRANCE

Organization of inspections

The application of Community control arrangements is the responsibility of the Secretariat of State for the Sea and is carried out by the administration of Maritime Affairs (AFMAR), which employs staff in approximately 20 quarters or districts along the Atlantic coastline and deals with a wide spectrum of maritime matters including fisheries. France does not have a specially-appointed Fisheries Inspectorate. Fisheries inspections in ports are one of the surveillance tasks entrusted to the maritime police (Gendarmes Maritimes) under the direction of AFMAR.

Fisheries surveillance and inspection at sea in the French fishery zone are the responsibility of the regional operational surveillance and security centres (CROSS), which coordinate the various national resources (AFMAR units, units of the French Navy, customs vessels, etc.).

Summary of inspection vessels

Navy

<u>Name</u>	<u>Built</u>	<u>Length</u>	<u>Tonnage</u>	<u>Speed (knots)</u>
Sterne	1980	49 m	350	17
Grèbe	1989	42 m	60	23

Regional surveillance vessels

Coriandre	1974	28 m	86	20
Armoise	1968	30 m	76	21
Marjolaine	1974	28 m	86	23
Tourne Pierre	1983	28 m	80	28
Gabian	1987	32 m	80	26
La Mauve	1984	32 m	80	31

Air surveillance

The Air Force claims to spend about 500 flying hours each year on maritime surveillance, mainly in the Bay of Biscay. A large part of this time is spent on fisheries surveillance.

Principal deficiencies at present

The number of staff engaged on inspection duties in the ports is still inadequate and the frequency and extent of checks on landings are insufficient. Staff often have inadequate technical training. Infringements of technical conservation measures are not adequately prosecuted.

Insufficient time is devoted to the supervision of fishing activity at sea. Some of the ships are old and unsuited as inspection vessels.

The delay in transmitting monthly catch data to the Commission is unacceptable and is made still more serious by the fact that France does not always take national measures to stop fishing. The Commission also has information showing that certain catch data for the period 1986-88 which it received had been "massaged" to comply with the quotas available. However, it should be noted that the fisheries statistics system has been overhauled since then.

The fishing industry in France exerts considerable political influence and some groups have political connections which give them a feeling that they can act with impunity.

Hence, in some regions on the Atlantic coast, minimum mesh sizes and fish sizes are not complied with in the cases of a number of species for which market demand is brisk. In those ports, a lack of political will does not encourage the inspection authorities to take action.

IRELAND

Organization of inspection

The Department of the Marine is the competent body responsible for the application of Community inspection arrangements. There is a fisheries inspectorate, including seven full-time fishery officers, located in the principal landing ports.

Fisheries surveillance and inspections at sea in the Irish fishery zone are conducted by the Irish Naval Service (Defence Ministry) with a fleet of vessels dedicated almost entirely to fisheries control.

Inspection vessels

<u>Name</u>	<u>Tonnage</u>	<u>Length</u>	<u>Speed (knots)</u>
Deirdre	1 150	63 m	18
Emer	1 500	65 m	18
Aisling	1 500	65 m	18
Aoife	1 500	65 m	18
Eithne (with helicopter facilities)	2 000	90 m	18

There are also two fast patrol vessels purchased in 1988, each of 63 m length and capable of 27 knots.

Air surveillance

In cooperation with the Naval Service, Ireland's Air Corps operates a fisheries surveillance aircraft. A pilot satellite surveillance project, part-financed by the Community, is being set up.

Principal deficiencies at present

The shore-based inspection service suffers from a lack of qualified personnel and equipment. Efficient utilization of inspection ships is hampered by crew shortages.

Cooperation with other national inspection services (France and the United Kingdom) in waters adjacent to each other's territories could be improved so that offending vessels cannot escape inspection.

The failure to inspect landings at ports results in false declarations, particularly as regards catches of plaice and sole in the Irish Sea and of mackerel in the VIA zone.

NETHERLANDS

Organization of inspection

The Ministry of Agriculture and Fisheries is responsible for the application of Community control arrangements through a specialized fisheries inspection service which forms part of the General Inspection Service (AID). The fisheries inspectorate is administered through three regionally-based centres and has approximately 180 full-time inspectors located in the ports.

Fisheries surveillance and inspection at sea in the Dutch fishery zone are conducted by Navy minesweepers detached from time to time from their military duties and in coastal waters by a number of small patrol vessels of the Water Police.

Vessels used for inspection

Royal Navy

5 minesweepers (35 m, 450t, 16 knots)

Water police

7 patrol craft (1984/87, 24 m, 20 knots).

Air surveillance

There is no organized routine airborne surveillance of fisheries. Coastguard aircraft, which may also carry fisheries inspectors, may pass information on sightings of fishing vessels to the inspection authorities on request.

Principal deficiencies at present

In recent years the Netherlands has taken fairly severe measures to eliminate false catch declarations and over-fishing arising from the considerable over-capacity in the fleet. In most cases, infringements detected are prosecuted. However, effective work in the ports is undermined by penalties for offences being insufficiently severe.

Dutch navy vessels devote insufficient time to fisheries enforcement, which leaves the fishery zone outside 12 miles unsupervised for extensive periods. Hence checks on compliance with restrictions on the fishing effort by beam trawlers, particularly the limit on engine size, are inadequate.

Despite the efforts made, "grey" marketing channels continue to exist and undermine the reliability of the catch figures sent to the Commission. Catches of pelagic species in particular, and especially mackerel, are still being under-reported.

PORTUGAL

Organization of inspection

The Secretariat General for Fisheries in the Ministry of Agriculture and Fisheries is responsible for the application of Community surveillance arrangements. A general inspectorate for fisheries, which currently consists of 12 inspectors, has been set up. Staff from the Ministries of Finance (Customs) and Defence (Navy) as well as from other Departments take part in fisheries inspections.

The Portuguese Navy is responsible for fisheries surveillance at sea and operates a three-tier system designed to cover coastal fisheries, the zone adjacent to the mainland seawards to 40 miles and an outer zone extending to 200 miles together with the fishery zone around the Azores and Madeira.

Inspection vessels

<u>Vessel</u>	<u>Built</u>	<u>Tonnage</u>	<u>Length</u>	<u>Speed (knots)</u>
10 'Cacine' class	1964-70	app. 300	40 m	16
10 corvettes	1970-75	1 200	90 m	18
6 coastal vessels *	1960-70	50	15 m	15

The Community has made a financial contribution to the modernization of these vessels.

* Five new vessels will come into service at the end of 1991.

Air surveillance

The Portuguese Air Force is currently refitting two aircraft with up-to-date surveillance and communications equipment and intends to purchase three others. Each aircraft will then be required to devote 200 flying hours a year to fisheries surveillance.

A pilot project on satellite surveillance is being part-financed by the Community. This system may be scaled up in the light of experience.

Principal deficiencies at present

Effective controls in the ports are hampered by the division of responsibilities between civil and military authorities. This is particularly true of landings other than for auctions, especially those from the NAFO zone. The establishment of the Inspectorate-General for Fisheries as coordinating body constitutes progress in this respect but it remains to be seen whether responsibilities will continue to be scattered over a number of bodies. Inspections at ports will have to be stepped up.

At sea the means currently available for inspection are inadequate, being suitable for use of fisheries inspections only in good weather conditions. Equipment on the inspection vessels is being modernized and inspection at sea should become more effective when the new vessels come into service.

In general, trawler fishermen fail to comply with minimum mesh sizes so that under-sized fish are landed.

UNITED KINGDOM

Organization of inspection

The Fisheries Department of the Ministry of Agriculture, Fisheries and Food (MAFF) in England and Wales, the Scottish Office's Agriculture and Fisheries Department in Scotland (SOAFD) and the Department of Agriculture for Northern Ireland (DANI) cooperate in taking responsibility for the application of Community surveillance arrangements.

Each Department has its own sea fisheries inspectorate with a district organization which totals approximately 180 full-time inspectors located throughout UK ports.

The Royal Navy conducts fishery control and surveillance on behalf of the Ministry of Agriculture, Fisheries and Food, whilst the SOAFD has its own civilian fleet of five patrol vessels.

Inspection vessels

England, Wales and Northern Ireland

	<u>Length</u>	<u>Tonnage</u>	<u>Speed</u> (knots)
6 "Island" class FPV's	60 m	1 250	16
2 "Castle" class FPV's	70 m	1 600	18
6 minesweepers	37 m	500	14

Scotland

2 FPV's	67 m	1 250	18
2 FPV's	53 m	900	16
1 FPV	60 m	580	16
2 inshore PV's	20 m	70	24

Air surveillance

MAFF operates 3 aircraft dedicated exclusively to fisheries surveillance through a private aviation company.

SOAFD is considering the purchase of two twin-engined aircraft to take over the duties hitherto carried out by private companies.

Principal deficiencies at present

The division of the exclusive economic zone among three regional inspection authorities may result in uneven levels of inspection, and perhaps the punishment of infringements, across the United Kingdom.

The tendency to land catches as close as possible to the fishing grounds, sometimes at ports which are not permanently supervised, makes it hard for the inspection authorities to check catch declarations. A Commission inquiry in 1988 showed that records of where mackerel had been caught were incomplete.

In general, however, the United Kingdom has demonstrated vigour and efficiency. Future problems may arise from changes in fisheries involving diversification in species and a larger number of landing places. In recent years the United Kingdom has had to contend with the registration of vessels exported by other Member States, which has posed special inspection problems, particularly compliance with quotas, to which it does not yet appear to have found satisfactory solutions.

ANNEXE III

REVISED TABLE OF INSPECTIONS OF FISHING ACTIVITIES CARRIED
OUT BY THE AUTHORITIES OF THE MEMBER STATES IN 1990. (1)

A. number of inspection days spent at sea by the vessels of the national control service.

1 9 9 0		
MEMBER STATES	NUMBER OF DAYS	ZONE
GERMANY	375	IIIc
	676	IV
	14	VI
	total	1.065
BELGIUM	48	IVc
DENMARK	69	IIIan
	76	IIIas
	11	IIIb
	122	IIIc
	57	IIId
	131	IVb
total	466	
SPAIN	872	VIII
	1.306	IX
	350	COPACE
	total	2.528
FRANCE	253	VII
	750	VIII
	38	E.E. GUYANE
	total	1.041
IRLAND	56	VIa
	141	VIIa
	72	VIIb
	25	VIIc
	344	VIIg
	268	VIIj
	14	VIIk
	1	VIIh
	total	921

(1) Source: Communications from the member states in
with Regulation (EEC) N° 3561/85.

1 9 9 0		
MEMBER STATES	NUMBER OF DAYS	ZONE
NETHERLAND	1.346	IVb, IVc
PORTUGAL	1.964	IX
	299	X
	102	CECAF
----- total	2.365	-----
UNITED KINGDOM	1.740	II, IV
	673	VI
	770	VII
	7	VIII
----- total	3.190	-----
EEC total	12.970	

B. Inspections of fishing vessels carried out at sea

		Country in which vessels are registered									
		BEL	DEU	DNK	ESP	FRA	IRE	NLD	PRT	GBR	OTH
1 - Total	area										
vessels	II	0	0	0	0	2	0	0	0	0	3
inspected	III	11	55	378	0	0	0	0	0	0	12
at sea	IV	454	377	445	5	166	5	2850	0	1322	139
by ICES/NAFO/ CECAF areas	V	0	0	0	0	0	0	0	0	0	0
	VI	0	5	2	96	173	50	18	1	483	124
	VII	117	9	14	274	1507	197	34	3	479	0
	VIII	62	0	0	1083	920	1	0	3	1	0
	IX	0	0	0	797	0	0	0	7103	0	2
	X	0	0	0	22	0	0	0	235	0	0
	COPACE	0	0	0	182	0	0	0	4	0	0
	ZEE GUY	0	0	0	0	208	0	0	0	0	106
Total number of vessels committing an offence		45	49	50	541	318	17	93	1172	95	13
2 - TOTAL number of offences at sea reported in the following sectors:											
- logbook and/or landing declaration	(T)	14	5	10	73	28	4	16	9	58	0
	(A)	8	5	5	7	11	1	4	3	19	0
	(S)	0	0	0	45	0	0	0	2	0	0
	(R)	6	0	5	8	16	1	10	0	35	0
- illegal gear	(T)	18	18	12	39	82	1	35	111	13	0
	(A)	7	0	0	0	16	0	8	28	6	0
	(S)	0	17	0	29	0	0	5	27	0	0
	(R)	11	1	12	9	66	1	21	1	6	0
- fishing prohibited because of											
* close area	(T)	2	12	9	49	110	0	19	49	4	0
	(A)	0	5	0	0	21	0	1	0	0	0
	(S)	0	1	0	30	0	0	0	16	0	0
	(R)	2	6	9	18	89	0	18	1	4	0
* excessive engine power or tonnage excessive	(T)	2	0	5	1	0	0	10	0	5	0
	(A)	1	0	1	0	0	0	3	0	2	0
	(S)	0	0	0	0	0	0	0	0	0	0
	(R)	1	0	4	1	0	0	7	0	3	0

T = TOTAL

A = OFFICIAL WRITTEN WARNINGS

S = ADMINISTRATIVE PENALTIES

R = INFRINGEMENTS BROUGHT TO COURT

		Country in which vessels are registered									
		BEL	DEU	DNK	ESP	FRA	IRE	NLD	PRT	GBR	OTH
- illegal catch resulting from											
* directed fishery	(T)	3	0	10	2	0	5	2	1	0	0
	(A)	0	0	0	0	0	0	0	0	0	0
	(S)	0	0	0	0	0	0	0	0	0	0
	(R)	3	0	10	0	0	0	1	0	0	0
* by-catch	(T)	0	0	5	4	0	0	0	0	1	0
	(A)	0	0	0	1	0	0	0	0	1	0
	(S)	0	0	0	2	0	0	0	0	0	0
	(R)	0	0	5	1	0	0	0	0	0	0
* undersized fish	(T)	7	5	0	24	50	4	13	10	15	0
	(A)	6	5	0	0	14	1	7	0	3	0
	(S)	0	0	0	7	0	0	2	3	0	0
	(R)	1	0	0	6	36	1	1	0	10	0
- unauthorised fishery											
	(T)	0	2	3	108	1	4	0	227	10	13
	(A)	0	1	0	0	0	0	0	133	0	0
	(S)	0	1	3	56	0	0	0	17	0	0
	(R)	0	0	0	29	1	0	0	0	0	13
- marking gear											
	(T)	0	2	0	25	19	2	1	387	1	0
	(A)	0	2	0	0	0	0	0	315	0	0
	(S)	0	0	0	10	0	0	0	18	0	0
	(R)	0	0	0	14	18	0	0	0	0	0
- marking and identification of vessel											
	(T)	4	0	4	28	5	2	1	60	3	0
	(A)	4	0	3	1	0	0	0	48	0	0
	(S)	0	0	0	8	0	0	0	3	0	0
	(R)	0	0	1	12	5	0	0	0	0	0
- others											
	(T)	6	1	9	226	30	2	1	315	19	0
	(A)	3	0	2	2	1	0	1	161	3	0
	(S)	0	1	3	193	0	0	0	30	0	0
	(R)	3	0	4	19	29	0	0	0	1	0

T = TOTAL

A = OFFICIAL WRITTEN WARNINGS

S = ADMINISTRATIVE PENALTIES

R = INFRIGEMENTS BROUGHT TO COURT

C. Offences discovered in port

	Country in which vessels are registered									
	BEL	DEU	DNK	ESP	FRA	IRE	NLD	PRT	GBR	OTH
Total number of offences reported										
- Logbook and/or landing declaration (T)	27	35	280	64	18	0	529	3	346	4
(A)	20	15	166	0	5	0	11	0	287	1
(S)	0	9	21	52	0	0	0	1	0	0
(R)	7	7	93	12	13	0	518	0	59	1
- Illegal gear (T)	1	5	5	5	22	0	46	94	5	1
(A)	0	1	0	0	17	0	4	0	3	0
(S)	0	1	0	3	0	0	0	46	0	0
(R)	1	3	5	2	4	0	42	1	2	1
- fishing prohibited because of:										
* closed area (T)	2	0	6	5	24	0	0	104	0	0
(A)	0	0	0	0	14	0	0	0	0	0
(S)	0	0	0	4	0	0	0	43	0	0
(R)	2	0	6	0	10	0	0	1	0	0
* excessive engine power or tonnage (T)	0	0	0	0	2	0	2	5	0	0
(A)	0	0	0	0	1	0	0	0	0	0
(S)	0	0	0	0	1	0	0	0	0	0
(R)	0	0	0	0	0	0	2	0	0	0
- Illegal catch resulting from:										
* directe fishery (T)	1	0	9	0	0	0	99	2	1	0
(A)	0	0	0	0	0	0	1	0	0	0
(S)	0	0	0	0	0	0	0	0	0	0
(R)	1	0	9	0	0	0	98	0	1	0
* by-catch (T)	1	0	40	11	0	0	0	0	0	0
(A)	0	0	0	1	0	0	0	0	0	0
(S)	0	0	0	10	0	0	0	0	0	0
(R)	1	0	40	0	0	0	0	0	0	0

T = TOTAL

A = OFFICIAL WRITTEN WARNINGS

S = ADMINISTRATIVE PENALTIES

R = INFRIGEMENTS BROUGHT TO COURT

	Country in which vessels are registered									
	BEL	DEU	DNK	ESP	FRA	IRE	NLD	PRT	GBR	OTH
* undersized fish										
(T)	7	18	38	4	113	0	81	22	128	0
(A)	5	6	0	0	19	0	6	0	91	0
(S)	0	7	0	2	3	0	0	3	0	0
(R)	2	5	38	1	91	0	75	0	37	0
- unauthorized fishery										
(T)	0	6	5	23	0	2	11	69	0	0
(A)	0	0	0	0	0	1	0	0	0	0
(S)	0	2	2	19	0	0	1	35	0	0
(R)	0	0	3	4	0	1	10	0	0	0
- marking gear										
(T)	0	1	8	6	54	0	0	6	0	9
(A)	0	1	6	0	52	0	0	0	0	9
(S)	0	0	0	1	1	0	0	4	0	0
(R)	0	0	2	5	1	0	0	0	0	0
- marking and identification of vessel										
(T)	10	0	0	3	30	0	10	6	0	0
(A)	10	0	0	0	0	0	7	0	0	0
(S)	0	0	0	2	0	0	0	4	0	0
(R)	0	0	0	0	30	0	3	0	0	0
- others										
(T)	25	2	0	52	18	0	0	274	0	0
(A)	24	1	0	2	2	0	0	0	0	0
(S)	0	0	0	50	0	0	0	112	0	0
(R)	1	1	0	0	16	0	0	0	0	0

T = TOTAL

A = OFFICIAL WRITTEN WARNINGS

S = ADMINISTRATIVE PENALTIES

R = INFRIGEMENTS BROUGHT TO COURT

ANNEX III - bis

INSPECTIONS CARRIED OUT BY
COMMUNITY STAFF

YEAR	NUMBER OF DAYS OF INSPECTIONS	NUMBER OF INSPECTORS IN SERVICE	NUMBER OF TOURS OF DUTY
1985	402	11	52
1986	1 126	13	65
1987	1 266	14	53
1988	1 590	15	68 + 4 NAFO
1989	1 784	15	66 + 4 NAFO
1990	1 401	15	58 + 6 NAFO
1991	1 555	19 ¹	42 + 10 NAFO

¹ Including two who joined in October 1991.

TRANSMISSION OF CATCH DATA¹Delays in transmission

Member States	Number of days delay (average)				
	1987	1988	1989	1990	1991
Germany	6.5	1	1.5	0	0
Belgium	0	1	1.5	0	0
Denmark	4	9	4.5	4.5	5
Spain ²	41	17	6.5	3	1
France ³	12	20.5	26.5	37	13 ⁴
Ireland	7	8	6	8	9
Netherlands	1.5	3.5	2	0	0
Portugal	1.5	9	7.5	10	8
United Kingdom	7	5.5	2.5	1	1

- 1 Article 9(2) of Regulation (EEC) No 2241/87 of 23 July 1987 requires each Member State to inform the Commission, before the 15th of each month, of the quantities of each stock or group of stocks subject to TACs or quotas landed during the preceding month.
- 2 The Commission began infringement proceedings in 1987. In view of the considerable reduction in delays in transmission, these were suspended in 1989.
- 3 The Commission decided to initiate infringement proceedings on 31 January 1990.
- 4 The situation regarding delays in receipt has improved since June 1991.

USE OF SATELLITE TECHNOLOGY
FOR FISHING SURVEILLANCE

1. Given the extent of the areas that need to be monitored and the fact that the vessels fishing there are spread out over a wide expanse, the checks carried out by Member States using conventional sea- and air-based means are necessarily limited in scope, fragmentary, irregular and difficult to coordinate. For example, they are quite inadequate to check the declarations made at sea by masters on catch sites and dates.

Unless one is prepared to commit the very considerable resources, at prohibitive cost, that would be required to use just conventional means, the possibility of using new technologies to improve the level of monitoring must be considered. Such new technologies, based on the use of satellites, should make it possible not only to make the surveillance of fishing activities by fishing vessels more efficient but also to improve vessel safety and management for fishermen and owners alike. The use of satellites would obviously not remove the need to carry out inspections at sea and checks on landings, but could reduce the cost of such inspections or make them more cost-effective.

2. In 1988 DG XIV commissioned an exploratory study on remote methods of direct, automatic vessel identification and location, including the extent to which it would be possible to establish the nature of their activities and to communicate with them.

The study, which was contracted out to an independent consultant, concluded that it was technically possible to introduce over the next few years automatic surveillance systems that would involve fitting fishing vessels with tamperproof beacons ("blue boxes") and setting up computerized ground control stations. The study recommended combining the GPS position-finding system and the INMARSAT communication systems.

3. Portugal has begun work on an experimental project involving an automatic surveillance system; this project receives a Community financial contribution under Council Decision 87/278/EEC of 18 May 1987 on the development of the monitoring and supervision facilities of the Member States. The project is entitled MONICAP and is based on combining GPS and INMARSAT.

In the first phase, MONICAP covers only Portuguese vessels fishing in Portuguese waters. It is intended to link it up with the broader organizational plan for the management of all Portuguese fisheries.

Tests of the MONICAP system carried out using a scientific research vessel and a number of fishing vessels equipped with beacons have given positive results.

4. The Commission wishes to promote the use of such new techniques in the Community, to the extent that they may help make surveillance more effective. The Vice-President of the Commission, Mr Marín, has expressed this view on numerous occasions.

The Commission wishes to see these new automatic surveillance systems integrated within a Community structure that would permit expansion in a harmonious manner, avoid problems of technical incompatibility and give the best results at the lowest cost.

A study along these lines has been carried out under the joint responsibility of the Directorate-General for Fisheries (DG XIV) and the Directorate-General for Telecommunications, Information Industries and Innovation (DG XIII). This study is based on the results of the Portuguese pilot scheme.

The specific aim of the study is to provide the Member States and the Commission with information on the various options and costs of a Community-wide, satellite-based automatic surveillance system of fishing vessels for the purpose of applying the provisions of the common fisheries policy as regards conservation and monitoring.

The ideal system should enable:

- the position of fishing vessels to be pinpointed at any given time;
- data to be processed either in a Community centre or in national centres, or in a hybrid structure;
- information to be provided such that Member States may monitor fishing vessels in their waters whatever flag they fly and locate their own vessels wherever they may be.

The Commission could be included in the system in a way enabling it to assume a role akin to that of a coastal State for non-member country vessels fishing in Community waters and of flag State for Community vessels fishing in waters covered by international agreements.

5. The Commission has requested the assistance of the surveillance and enforcement authorities in all Member States in pursuing the above-mentioned study. The authorities concerned have held initial discussions with the Commission and have seen a practical demonstration of the MONICAP system in operation; in addition, the results of the study have been presented to the national authorities. However, whilst expressing interest in cooperating in the Commission study, almost all national representatives evinced considerable wariness about the possibilities of future expansion given the political and legal constraints that applied and the considerable uncertainty as regards the cost/benefit ratio.

Ireland nevertheless stated that it could install a number of beacons on fishing vessels on an experimental basis.

A resumé of the conclusions of the study, with an estimate of the costs, is attached. It seems that, according to the system architecture chosen, the costs could rise to 1,600 to 2,400 ECU per vessel per year. The total costs of the system, calculated over a period of 5 years, can vary, again according to the architecture chosen, for a fleet of 10,000 vessels between 84 and 122 MECU or, for a fleet of 30,000 vessels, between 240 and 319 MECU. On an annual basis, these costs only represent a small percentage of the value of landed products.

6. Since establishment of an integrated surveillance system encompassing vessels, satellite and one or more national or Community control centres will take a number of years, the Commission has ordered a computer simulation of the system which could be tested in the near future on the data derived from the MONICAP project. The experience acquired could be used to create a Community architecture.

Summary of conclusions

The main conclusions of this study can be summarized as follows:

- 1 It would be technically feasible to establish an integrated satellite-based fisheries monitoring system of the kind envisaged in the 1990 Communication from the Commission concerning the Common Fisheries Policy.

The overall concept of the system could be realized in a number of ways, the main options being with respect to the capabilities of the on-board position reporting terminals, the degree of centralization (if any) of land-based data processing functions, the implementation, or not, of interactive monitoring facilities using graphical workstations (in addition to automatic analysis of data), and whether or not custom software development would be undertaken by all participating Member States on a shared basis.

- 2 The system can be based on existing satellite services, the most appropriate being the US Global Positioning System (GPS) and the international Inmarsat-C mobile communication service.
- 3 New legislation would probably be required in most Member States to provide for the mandatory fitting of position reporting terminals on relevant vessels.
- 4 The data processing subsystem could be built around a commercial database product and, if an interactive monitoring facility is incorporated, a Graphical Information System (GIS) product. Substantial additional custom software development, however, would also be required.

The requirements for distribution of data between the sites involved in the system could readily be met by existing terrestrial communication services.

- 5 The total costs associated with the proposed system would be around 1,600-2,400 ECU per annum for each vessel included in the system, depending on the options chosen. With 10,000 vessels, for example, the total costs over 5 years would be around 85-120 million ECU.
- 6 The main benefits of the system would be that:
 - it would improve the efficiency of fisheries monitoring by identifying probable infringements of fishing regulations and providing the relevant details to national enforcement authorities, who would, consequently, be able to optimize the deployment of inspection vessels and surveillance aircraft
 - the very presence of the system would probably act, to some extent, as a deterrent against fishermen committing infringements
 - it would allow improved conservation tools to be developed.

- 7 The system's role would be to complement traditional monitoring methods rather than to replace them, for the following main reasons:
 - the system would only be capable of monitoring compliance with certain types of regulation, namely those which relate to vessels of particular flags and types, fishing in certain geographical areas at certain times (as distinct from regulations concerned with particular fish species or mesh sizes)
 - it would not be capable of providing conclusive proof that a vessel was fishing in a forbidden area; physical inspection would still be required to obtain such proof
 - it is unlikely that all vessels fishing in EC waters would be included in the system.

- 8 The concept of the proposed system could be tested by implementing an initial small-scale pilot system with, for example, only a CBC-operated centre for monitoring third-country vessels licensed to fish in EC waters and EC vessels licensed to fish in third country waters.

Cost estimates

The total estimated 5-year costs of the three subsystems (data retrieval, processing and distribution) are summarized in the tables below. The estimates are based on the participation of 9 Member States in the proposed system, namely those affected by the CFP: Belgium, Denmark, France, Germany, Ireland, the Netherlands, Portugal, Spain and the UK. The data processing costs would vary from one Member State to another, because of differences in fleet sizes, local hardware prices, etc. We do not believe, however, that such differences would be significant in relation to the overall magnitudes of the costs and, consequently, we have assumed the same estimates for each country.

	<i>Numbers of vessels</i>		
	<i>10,000</i>	<i>20,000</i>	<i>30,000</i>
With basic terminals	78	156	234
With enhanced terminals	98	196	294

Total 5-year data retrieval costs (million ECU)

	<i>Without interactive monitoring</i>	<i>With interactive monitoring</i>
<i>Distributed/Bespoke</i>	13.9	22.5
<i>Hybrid/Bespoke</i>	14.5	23.1
<i>Centralized/Bespoke</i>	4.9	-
<i>Distributed/Shared</i>	6.8	13.3
<i>Hybrid/Shared</i>	7.4	13.9

Total 5-year data processing costs (million ECU)

	<i>Numbers of vessels</i>		
	<i>10,000</i>	<i>20,000</i>	<i>30,000</i>
Distributed	0.5	0.8	1.1
Hybrid	1.0	1.5	1.5
Centralized	0.9	1.5	1.5

Total 5-year data distribution costs (million ECU)

The following table shows the total 5-year costs of the whole monitoring system, assuming the following:

- basic position reporting terminals (ie, without data entry units and printers)
- no interactive monitoring facilities at FMCs
- shared software development (where possible, ie, in the distributed in hybrid system architecture options).

This is the lowest cost combination of the basic options.

	<i>Numbers of vessels</i>		
	<i>10,000</i>	<i>20,000</i>	<i>30,000</i>
Distributed	85	164	242
Hybrid	86	165	243
Centralized	84	162	240

Total 5-year costs of whole system (million ECU) - basic terminals, no interactive monitoring, shared development

The most expensive combination of options is as follows:

- enhanced position reporting terminals (with data entry units and printers)
- with interactive monitoring facilities (distributed and hybrid options only)
- bespoke software development.

The corresponding total 5-year costs are as follows:

	<i>Numbers of vessels</i>		
	<i>10,000</i>	<i>20,000</i>	<i>30,000</i>
Distributed	121	219	318
Hybrid	122	221	319
Centralized*	104	202	300

* without interactive monitoring

Total 5-year costs of whole system (million ECU) - enhanced terminals, with interactive monitoring, bespoke development

A. MAXIMUM FINES UNDER NATIONAL LEGISLATION FOR CERTAIN INFRINGEMENTS CONCERNING SEA FISHERIES (in ecus) (1)

NATURE OF INFRINGEMENT	B	DK (2)	D	E	F	IRL	NL	PT	UK
1. Failure to cooperate with fisheries inspectors	75.664	3.167	(3)	78.493	71.642	130.141	(3)	(3)	7.168
2. Infringement of provisions concerning logbooks, and declarations of landings and transshipments	75.664	3.167	72.963	78.493	716	130.141	10.792	1.393	2.867
3. Unauthorized fishing (no quota)	75.664	30 %	72.963	31.397	71.642	130.141	10.792	11.145	71.679
4. Unauthorized fishing (no licence)	75.664	30 %	72.963	31.397	71.642	130.141	10.792	27.860	71.679
5. Fishing with unauthorized gear	75.664	30 %	72.963	31.397	21.493	130.141	10.792	11.145	7.168
6. Keeping undersized fish on board	75.664	30 %	72.963	31.397	21.493	130.141	10.792	3.344	2.867

B. FINES IN THE MEMBER STATES FOR CERTAIN INFRINGEMENTS (in ecus) (1)

NATURE OF INFRINGEMENT	B	DK (2)	D	E	F	IRL	NL	PT	UK
1. Failure to cooperate with fisheries inspectors	236 - 1.418	(3)	4.864 - 9.728	78.493	7.164 - 71.642	104.113 (6)	4.317 (6)	(3)	- 717
2. Infringement of provisions concerning logbooks, and declarations of landings and transshipments	236 - 1.418	- 127	- 2.432	7.849	- 716	50.755	4.317 (6)	1.393	717 - 2.867
3. Unauthorized fishing (no quota)	236 - 1.418 (6)	25 % - 30 %	4.864 - 9.728	31.397	7.164 - 71.642 (6)	171.136 (6)	4.317 (6)	11.145 (6)	2.867 - 8.601 (6)
4. Unauthorized fishing (no licence)	236 - 1.418 (6)	25 % - 30 %	9.728 - 17.025	31.397	7.164 - 71.642 (6)	171.136 (6)	4.317 (6)	27.860 (6)	13.619 - 64.511
5. Fishing with unauthorized gear	236 - 1.418 (6)	(5)	4.864 - 9.728	31.397	430 - 21.493 (6)	139.955 (6)	4.317 (6)	11.145 (5)	2.867 - 7.168 (5)
6. Keeping undersized fish on board	236 - 1.418 (6)	- 30 %	2.432 - 9.728	31.397	430 - 21.493 (6)	156.170 (6)	4.317 (6)	3.344 (6)	717 - 2.867 (6)

(1) ECU rate for June 1991.

(2) Fines determined as a percentage varying with the seriousness of the infringement, the market value of the catch or the proportion in contravention (on each occasion the market value of the catch is notified to the Ministry of Fisheries).

(3) Crime under ordinary law.

(4) Total fines.

(5) Immediate seizure of illicit gear.

(6) Catches and gear may be seized.

Sources: National legislation.

VF