COMMISSION OF THE EUROPEAN COMMUNITIES

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Brussels, 27 November 1991

Proposal for a

COUNCIL DIRECTIVE

concerning the minimum safety and health requirements

for work on board fishing vessels

10th individual Directive within the meaning of Directive 89/391/EEC

(presented by the Commission)

EXPLANATORY MEMORANDUM

Proposal for a Council Directive concerning safety and health at work on board fishing vessels.

1) LEGAL BASIS

The proposal is based on Article 118a of the EEC Treaty and takes the form of an individual Directive within the meaning of Article 16 of Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at the workplace(1), the Annex to which specifically mentions the fishing industry.

In its Communication on its programme concerning safety, hygiene and health at work(2) the Commission pointed out that fishing was a high-risk sector because of the particularly high incidence of serious accidents. The measures announced by the Commission in its Communication were noted by the Council in its Resolution of 21 December 1987(3).

(1) OJ L 183 of 29.6.1989, pp. 1 and 59

(2) OJ C 28 of 3.2.1988, pp. 3-8

(3) OJ C 28 of 3.2.1988, pp. 1-2

The proposal forms part of the action planned to cater for the social aspects of the completion of the internal market[4] and is one of the initiatives referred to by the Commission in the Communication on its action programme relating to the implementation of the Community Charter of Basic Social Rights for Workers[5].

2) AIMS OF THE PROPOSAL

The proposal applies to all vessels over 12 m long, which in practice means all vessels operated by more than one person. Its aims are as follows:

- to lay down minimum health and safety requirements for fishing vessels as special workplaces, since these are excluded from the scope of Council Directive 89/654/EEC[6] of 30.11.1989 (1st individual Directive);

(4) White paper - COM(85) 310 final

(5) COM(89) 568 final

(6) OJ L 393 of 30.12.1989, pp. 1-12

- to promote better health and safety conditions on board, by requiring external, and in particular meteorological, conditions to be taken into account, and compliance with specific minimum requirements during work;

- to cater for the free movement of workers in the fishing sector by laying down general training criteria for health and safety on board and the use of emergency escape and survival equipment, and by providing for detailed training for any person likely to command a vessel;

- to promote the provision on board of suitable emergency escape and survival equipment and, for vessels working away from the coast, position-indicating equipment for use in the event of shipwreck;

- finally, to promote the use on board of appropriate personal protective equipment for the specific requirements of work at sea.

3) THE PROPOSAL IN RELATION TO EXISTING NATIONAL LEGISLATION AND INTERNATIONAL CONVENTIONS

a) All coastal Member States have legislation covering certain aspects of the health and safety of fishermen.

Most of this is based on international provisions:

- the International Maritime Organization's International Convention for the Safety of Life at Sea (1974);

- the Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974;

- International Labour Organization (ILO) Convention No 125 concerning Fishermen's Certificates of Competency;

- the Torremolinos Convention on the Safety of Fishing Vessels (IMO) (1977);

and the 1974 Safety and health requirements for the construction and equipment of fishing vessels, drawn up jointly by the IMO, the ILO and the FAO (Food and Agriculture Organization).

In this context it should be pointed out that ILO Convention 125 and the Torremolinos Convention have been ratified and transposed into national law by only a limited number of Member States (3 and 7 respectively). Most countries have legislation which takes account of at least part of one or other of these Conventions. It should also be noted that the Torremolinos Convention applies only to vessels over 24 m and has not come into force because the countries which have ratified it do not account for sufficient tonnage as laid down in the Convention. There are plans to revise the Convention to make some of its provisions applicable to vessels over 55 m only.

These international conventions and the related secondary legislation in the Member States deal mainly with the intrinsic safety of vessels or emergency equipment, rather than health and safety at work, and it is therefore this latter area which the Commission particularly wishes to cover.

Furthermore, the proposal will not affect current work on revising the Torremolinos Convention, provided that it guarantees at least an equivalent level of safety and protection for workers. In this context, the Commission reserves the right to take measures to ensure that the Convention or similar provisions are applied as widely as possible to fishing vessels in the Community.

b) There are therefore major discrepancies in the national legislations of the different Member States with regard to the provisions contained in this proposal. An analysis shows that the legislation in many Member States covers vessels over a certain length only, and this can vary from one country to another.

Some Member States have no specific provisions at all on some of the aspects covered by this proposal, in particular health and safety training for fishermen.

c) The proposal's provisions on information, training, consultation and participation for fishermen contain elements which relate specifically to the fishing industry, but take the same form as those contained in Directive 89/391/EEC and individual Directives 89/654/EEC, 89/655/EEC[7], 89/656/EEC[8], 90/269/EEC[9] and 90/270/EEC[10] and the current proposal for a Council Directive concerning the minimum requirements for the provision of safety and/or health signs at work[11].

(7) OJ L 393 of 30.12.1989, pp. 13-17

(8) OJ L 393 of 30.12.1989, pp. 18 and 59

(9) OJ L 156 of 21.06.1990, pp. 9-13

(10) OJ L 156 of 21.6.1990, pp. 14 and 59

(11) OJ C 53 of 28.2.1991, pp. 46-64

These new provisions could therefore be incorporated into national legislation in the same way; Member States which have already transposed the Directives referred to above will have some experience in the matter.

4) CHARACTERISTICS OF THE PROPOSAL

a) This proposal is based on Article 118a of the EEC Treaty and is intended to establish minimum health and safety requirements for work in the fishing industry.

b) The proposal is for an individual Directive within the meaning of Article 16 of Directive 89/391/EEC, which established a new legal framework. This means that a number of the recitals, the provisions on information, training, consultation and participation for workers (in this case fishermen) and the final provisions have all been drafted in accordance with similar provisions contained in Directive 89/391/EEC and/or the individual Directives referred to in paragraph 3 c).

For the same reasons the definitions given in Article 3 of Directive 89/391/EEC also apply to the new proposal and have not been repeated.

c) Article 4 of the proposal contains provisions to ensure consistency with any other Directives covering fishing vessels or the equipment on board adopted pursuant to Article 100a.

d) The minimum requirements proposed were taken from or based on the international conventions referred to in paragraph 3 a). The aim of the proposal is to extend and harmonize existing provisions in the field rather than to introduce completely new provisions. However, since the international conventions do not cover safety and working conditions in the fishing industry, new provisions have been introduced on workstation design, work organization, living conditions on board, suitable health and safety training for fishermen and detailed health and safety training for anyone likely to command a vessel.

5) CONSULTATION OF THE PARTIES CONCERNED

Experts, government representatives and representatives of workers' and employers' organizations were consulted by the Commission and were involved in the preparation of the proposal. In particular the Joint Committee on Social Problems in Sea Fishing was invited to comment, and its observations were taken into account in the drafting of this proposal.

The Advisory Committee on Safety, Hygiene and Health Protection at Work (set up by Council Decision 74/325/EEC of 27.6.1974[12]) was also consulted and issued a generally favourable opinion, which was taken into account in the drafting of the proposal.

6) DESCRIPTION OF THE ARTICLES OF AND ANNEXES TO THE PROPOSAL

- Articles 1 and 2 contain general provisions describing the object of the Directive and its scope and giving various definitions.

(12) OJ L 185 of 9.7.1974, p. 15

- Articles 3-7 lay down obligations for vessel owners for the protection of the health and safety of fishermen:

  . while the vessel is in use (Article 3),

  . when the vessel is fitted out, for new vessels (Article 4), vessels already in use (Article 5) or vessels undergoing alterations (Article 6),

  . when the vessel is maintained (Article 7).

- Article 8 deals with information on health and safety for fishermen.

- Article 9 deals with health and safety training for fishermen.

- Article 10 relates to detailed health and safety training for any person likely to command a vessel.

- Article 11 relates to the consultation and participation of fishermen.

- Article 12 describes the procedure for adapting the annexes.

- Article 13 and 14 contain the final provisions.

- Annex I lays down minimum health and safety requirements for fishing vessels commissioned for the first time or altered or transformed on or after 1 January 1995.

- Annex II lays down minimum health and safety requirements for vessels commissioned before 1 January 1995.

- Annex III lays down minimum health and safety requirements concerning emergency escape and survival equipment.

- Annex IV lays down specific health and safety requirements for personal protective equipment used at sea.

Proposal for a

COUNCIL DIRECTIVE

concerning the minimum safety and health requirements

for work on board fishing vessels

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 118A thereof,

Having regard to the Commission proposal, drawn up after consultation with the Advisory Committee on Safety, Hygiene and Health Protection at Work,

In cooperation with the European Parliament,

Having regard to the opinion of the Economic and Social Committee,

Whereas the Commission communication in its programme concerning safety, hygiene and health at work[1] provides for measures to make safety a more integral part of the design of vessels and the definition of tasks;

Whereas the Council in its Resolution of 21 December 1987 on safety, hygiene and health at work[2] noted the Commission's intention of submitting to it minimum requirements concerning the organization of the safety and health of workers at work;

Whereas compliance with the minimum requirements for ensuring a better level of safety and health on board fishing vessels is essential to ensure the safety and health of the workers concerned;

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(1) OJ C 28 of 3.2.1988, p. 3

(2) OJ C 28 of 3.2.1988, p. 1

Whereas, because of the particularly difficult working and living conditions on board fishing vessels, the incidence of fatal accidents among workers engaged in sea fishing is very high;

Whereas this Directive is an individual Directive within the meaning of Article 16, paragraph 1, of Council Directive 89/391/EEC of 12 June 1989[3] on the introduction of measures to encourage improvements in the safety and health of workers at work and that therefore the provisions of the latter are fully applicable to work on board fishing vessels, without prejudice to more stringent and/or specific provisions contained in the present Directive;

Whereas the individual Directives already adopted in the field of safety and health at work apply, unless otherwise specified, to sea fishing and that therefore it may in some cases be necessary to specify the particular characteristics of this activity in order to ensure that the individual Directives are correctly applied;

Whereas the Council Directive on the minimum health and safety requirements for improved medical treatment on board vessels[4] is applicable in full to the sea fishing industry;

Whereas this Directive constitutes concrete progress towards the achievement of the social dimension of the internal market,

HAS ADOPTED THIS DIRECTIVE:

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(3) OJ L 183 of 29.6.1989, p. 1

(4) OJ C 183 of 24.7.1990, p. 6.

OBJECT

Article 1

1) This Directive, which is an individual Directive within the meaning of Article 16 of Directive 89/391/EEC, lays down minimum safety and health requirements applicable to work on board fishing vessels.

2) The provisions of Directive 89/391/EEC are fully applicable to the field described in paragraph 1 without prejudice to more stringent and/or specific provisions contained in this Directive.

DEFINITION

Article 2

For the purposes of this Directive, the following terms have the meanings hereby assigned to them:

- fishing vessel (hereinafter called vessel): any vessel registered in a Member State or flying the flag of a Member State, used for catching or processing fish or other living resources from the sea, with a length between perpendiculars of 12 m or over;

- fisherman: any worker within the meaning of Article 3 (a) of Directive 89/391/EEC carrying out an activity on board a fishing vessel, or any person who, in carrying out an activity on board, is subordinate to the captain of the vessel;

- owner: the registered owner of a vessel, unless that vessel has

been chartered by demise or is managed, either wholly or in part, by a natural or legal person other than the registered owner under the terms of a management agreement; in that case the owner shall be construed as the demise charterer or natural or legal person managing the vessel, as appropriate.

GENERAL PROVISIONS

Article 3

The Member States shall take the measures necessary to ensure that:

- owners ensure that their vessels are fit for use, on the responsibility of the captain, in conditions, and in particular meteorological conditions, which do not endanger the health and safety of the fishermen;

- account is taken of any hazards faced by the rest of the crew when applying Article 8 (4) of Directive 89/391/EEC;

- any occurrences at sea which affect or could affect the health and safety of the fishermen on board are described in a detailed report to be forwarded to the relevant maritime authorities and are recorded carefully and in detail in the ship's log, where the national regulations or legislation in force require such a log to be kept on the type of vessel in question.

VESSELS COMMISSIONED FOR THE FIRST TIME

Article 4

Vessels commissioned for the first time on or after 1 January 1996 must comply with the minimum health and safety requirements laid down in Annexes I and III.

However, the minimum requirements contained in Annex I shall apply to the vessels referred to in the previous paragraph only if there are no relevant Community provisions introduced pursuant to Article 100a of the Treaty which guarantee at least an equivalent level of protection.

VESSELS ALREADY IN USE

Article 5

Vessels already commissioned before 1 January 1996 must comply with the minimum health and safety requirements laid down in Annexes II and III within three years of that date.

ALTERATIONS TO VESSELS

Article 6

Where vessels undergo structural alterations and/or transformations on or after 1 January 1996, such alterations and/or transformations must comply with the relevant minimum requirements laid down in Annexes I and III.

Article 7

For the protection of the health and safety of workers, the Member States shall take the measures necessary to ensure that owners:

- ensure that the vessels and their fittings and equipment, particularly those referred to in Annexes I and II, are technically maintained, and that any defects found which are likely to affect the health and safety of the fishermen are rectified as quickly as possible;

- take measures to ensure that the vessels and all fittings and equipment are cleaned regularly in order to maintain an appropriate standard of hygiene;

- keep on board the vessel an adequate quantity of suitable emergency and survival equipment in good working order in accordance with the specifications given in Annex III;

- take account, when implementing the provisions of Directive 89/656/EEC(5), of the personal protective equipment specifications given in Annex IV.

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(5) OJ L 393 of 30.12.1989, p. 18

INFORMATION FOR FISHERMEN

Article 8

Without prejudice to the provisions of Article 10 of Directive 89/391/EEC, the fishermen shall be informed of all measures to be taken regarding health and safety on board vessels.

TRAINING OF FISHERMEN

Article 9

Without prejudice to Article 12 of Directive 89/391/EEC, fishermen shall be given suitable training, in particular in the form of specific instructions, on health and safety on board vessels.

The training shall cover in particular the use of emergency escape and survival equipment and, for the fishermen concerned, the use of fishing gear and hauling equipment and the use of various types of signs, including hand signals.

DETAILED TRAINING

Article 10

Without prejudice to Article 5(3) of the Council Directive on the minimum health and safety requirements for improved medical treatment on board vessels, any person likely to command a vessel shall be given detailed training on:

- the prevention of occupational accidents on board;

- vessel stability and maintenance thereof when laden and during fishing operations;

- radio navigation and communication.

CONSULTATION AND PARTICIPATION OF WORKERS

Article 11

The consultation of fishermen and/or their representatives and their participation in discussions on the matters covered by this Directive and its annexes shall be in accordance with Article 11 of Directive 89/391/EEC.

ADAPTATION OF THE ANNEXES

Article 12

Purely technical adaptations of the annexes to take account of:

- the adoption of directives in the field of technical harmonization and standardization concerning certain aspects of the field covered by this Directive;

and/or:

- technical progress, changes in international regulations or specifications and new findings in the field of safety and health on board vessels;

shall be adopted in accordance with the procedure laid down in Article 17 of Directive 89/391/EEC.

FINAL PROVISIONS

Article 13

1. The Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 1 January 1995 at the latest. They shall forthwith inform the Commission thereof.

   Any such laws, regulations and administrative provisions adopted by the Member States shall contain a reference to this Directive, or

shall be accompanied by such a reference upon official publication. The Member States shall decide on this matter.

2. The Member States shall communicate to the Commission the texts of the provisions of national law which they have already adopted or adopt in the field covered by this Directive.

3. The Member States shall report to the Commission every five years on the practical implementation of the provisions of this Directive, indicating the points of view of employers and workers.

The Commission shall inform the European Parliament, the Council, the Economic and Social Committee and the Advisory Committee on Safety, Hygiene and Health Protection at Work.

Article 14

This Directive is addressed to the Member States.

Done at

For the Council,

The President

ANNEX I

MINIMUM SAFETY AND HEALTH REQUIREMENTS FOR FISHING VESSELS COMMISSIONED FOR THE FIRST TIME, AS REFERRED TO IN ARTICLES 4, 6 AND 7 OF THE DIRECTIVE

1. Preliminary note

The obligations laid down in this Annex apply whenever required by the features of the workplace, the activity, the circumstances or a hazard foreseeable on board a fishing vessel.

2. Stability and solidity

2.1. The hull, deckhouse superstructures, trunks, engines, companionways and other structures of the vessel, together with its fittings, must be sufficiently solid to enable it to withstand all foreseeable conditions in the service for which it is intended.

2.2. If a vessel is intended for use in ice, its hull must be strengthened to take account of the anticipated sailing conditions and the area of deployment.

2.3. All vessels must be sufficiently stable when intact in the conditions of service for which they are intended.

2.4. Any person likely to command a vessel must be familiar with the parameters governing the stability of that vessel so that he can maintain stability at all times when the vessel is laden and during fishing operations. Information on the vessel's stability must be available on board and must be accessible to the men on watch.

3. Electrical installations

Electrical installations must be designed and constructed so as not to present any danger and so as to provide:

- protection for the crew and vessel from electrical hazards,
- the services necessary to maintain the vessel in normal operational and habitable conditions without having recourse to an emergency power supply, and
- the services essential for safety if the main electrical power source fails.

An emergency source of electrical power must be provided outside the engine room and be so arranged as to ensure its functioning in the event of fire or other causes of failure of the main electricity supply.

The emergency source must be capable of providing power simultaneously for:

- internal communication equipment, fire detection systems and signals which may be required in an emergency;
- the navigation lights if solely electrical and the emergency lights aboard;
- the emergency fire pumps or bilge pump, where present,

for at least three hours, to give the rescue services time to reach the vessel.

Main and emergency switchboards must be located in different places so that they cannot all be accidentally exposed to flooding or fire.

4. Emergency escape routes and exits

4.1. Emergency escape routes and exits must remain clear and lead as directly as possible to the open deck or to a safe area and thence to the survival craft so that fishermen can evacuate workstations and living quarters quickly and safely.

4.2. The number, distribution and dimensions of the emergency escape routes and exits must depend on the maximum potential number of persons present.

4.3. Emergency doors and other emergency exits must be adequately watertight and fire resistant for their location and particular function.

Emergency doors should be operable from both sides easily and immediately by any person who may require to use them in an emergency.

4.4. Specific emergency escape routes, facilities and exits must be indicated by signs in accordance with national regulations transposing Directive 77/576/EEC(6) into law.

Signs must be placed at appropriate points and be made to last.

4.5. The emergency escape routes, facilities and exits, and the traffic routes and doors giving access to them, must be free from obstruction so that they can be used at any time without hindrance.

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(6) OJ L 229 of 7.9.1977, p. 12

4.6. Emergency escape routes, facilities and exits requiring illumination must be provided with emergency lighting of adequate intensity in case the lighting fails.

5. Fire detection and fire fighting

5.1. Depending on the dimensions and use of the vessel, the equipment it contains, the physical and chemical properties of the substances, products and materials present and the maximum potential number of people present, the crew accommodation and interior workplaces including the fish-hold, where necessary, must be equipped with appropriate fire-fighting equipment and, as necessary, with fire detectors and alarm systems.

5.2. Non-automatic fire fighting equipment must be easily accessible and simple to use.

The equipment must be indicated by signs in accordance with the national regulations transposing Directive 77/576/EEC into law.

Such signs must be placed at appropriate points and be made to last.

6. Ventilation of enclosed workplaces

Steps must be taken to see to it that there is sufficient fresh air in enclosed workplaces, having regard to the working methods used and the physical demands placed on the fishermen.

If a ventilation system is used, it must be maintained in

working order.

Any breakdown must be indicated by a control system where this is necessary for fishermen's health.

7. **Room temperature**

The temperature in living quarters, working areas, sanitary facilities and first-aid rooms must be appropriate to the particular purpose of such areas.

8. **Natural and artificial lighting of working areas**

8.1. Where workplaces do not receive sufficient natural light they must be equipped with artificial lighting suitable for the operation in hand, without placing the fishermen's safety and health in danger or jeopardizing other vessels.

8.2. Lighting installations in areas containing workplaces, stairs, ladders, and in passageways must be placed in such a way that there is no risk of accident to the fishermen and no hindrance to the navigation of the vessel.

8.3. Workplaces in which fishermen are especially exposed to risks in the event of failure of artificial lighting must be provided with emergency lighting of adequate intensity.

9. **Floors, walls and ceilings of rooms**

9.1. The floors of workplaces must be provided with non-slip surfacing and kept clear and free of obstacles.

Rooms containing workstations must be adequately insulated and soundproofed, bearing in mind the type of tasks involved and the physical activity of the fishermen.

9.2. The surface of floors, walls and ceilings in workplaces must be such that they can be cleaned or refurbished to an appropriate standard of hygiene.

10. Doors

10.1 The position and number of doors in watertight bulkheads and weatherproof enclosed superstructures should be reduced to the minimum compatible with the general arrangement and operational needs of the fishing vessel; openings must be fitted with appropriate means of sealing them off.

10.2 Doors and in particular sliding doors, where such have to be used, must function without risk of accident to the fishermen, especially in adverse weather and sea conditions.

11. Traffic routes - danger areas

11.1 Passageways, trunks, the outer part of deckhouses and all traffic routes in general must be equipped with guard rails, grab rails and lifelines or other means of ensuring the safety of the crew in the course of its activities on board.

Traffic areas around the foot and the top of ladders and stairways must be provided with non-slip surfacing.

11.2 Fixed ladders and stairways must be of adequate size and strength, with non-slip rungs and steps and handrails. If the top of the ladder on the upper deck leads into a trunk, a landing shall be provided. If the ladder leads onto an opening on the upper deck, the hand-rails must be extended to meet the guard rail protecting the opening on the upper deck.

11.3 If there is a risk that fishermen may fall through openings in the deck, or from one deck to another, adequate protection should be provided, wherever possible in the form of guard rails of adequate height (in all cases over 1 m).

11.4 Effective bulwarks must be installed on all exposed parts of the working deck of an adequate height to protect the crew from water washing onto the deck, taking into account the state of the sea and the weather conditions in which the vessel may be

used. The bulwarks must be fitted with scuppers or other similar devices to enable water to drain away quickly.

Fixed bulwarks must be high enough to protect fishermen from falls and in all cases higher than 750 mm.

However, if bulwarks of such a height may constitute a hindrance to fishing operations on any part of the deck, other arrangements must be made providing the same degree of safety.

11.5 Access to installations above the deck for operation or maintenance purposes must be such as to ensure the safety of the crew. Guard rails or similar devices of appropriate height must be provided to prevent falls.

11.6 On stern trawlers with ramps, the ramp must be fitted with a gate or other means of securing it of the same height as the adjacent bulwarks, to protect seamen from water entering from the stern and from the risk of falling into the ramp. This gate or other device must be easily opened and closed, preferably by remote control, must only be open for hauling in the net and must be capable of being shut as soon as the trawl has been hoisted on board.

12. Layout of the workstations

12.1 Non-slip flooring must be provided in the fishing gear and catch handling areas, the engine room, the workshops, the galley and other working areas.

12.2 Working areas must be kept clear, must be protected against the sea and must provide adequate protection for seamen against falling on board or overboard.

Handling areas must be sufficiently spacious, in terms of both height and surface area.

12.3 The vessel's engines must be controlled from a room which is separate, insulated and soundproofed from the engine room, and which must be accessible without entering the latter.

12.4 The controls for the hauling gear must be installed in an area sufficiently large to enable operators to work unhindered.

The hauling gear must also have automatic stop facilities to prevent improper use, and emergency stop facilities.

12.5 The hauling gear operator must have an adequate view of the hauling gear and the men at work.

If the hauling gear is controlled from the bridge, the operator should also have a clear view of the men at work, either directly or via any other suitable medium.

12.6 A reliable communication system must be used between the bridge and the working deck.

12.7 Contact with bare ropes and warps and with moving parts of the equipment must be minimized by installing protective devices.

Controls must be installed for moving masses, particularly on trawlers :

- devices to immobilize the otter boards,
- devices to control the swinging motion of the codend.

13. Accommodation

13.1 The location, design, soundproofing and insulation of the crew's accommodation and facilities and the access thereto should be such as to provide adequate protection against weather and sea, vibration and the effects of speed and against unpleasant odours from other parts of the vessel likely to disturb the fishermen during their period of rest. Appropriate measures should be taken to protect non-smokers against discomfort caused by tobacco smoke.

13.2 The crew's accommodation should be properly ventilated to ensure a constant supply of fresh air and prevent condensation.

Appropriate lighting must be provided in the crew quarters, with:

- adequate normal general lighting
- reduced general lighting to avoid disturbing fishermen who are resting
- local lighting in each berth.

13.3 The galley and mess should be of adequate size, adequately lit and ventilated and easy to maintain to appropriate standards of hygiene.

A storeroom of adequate size should be provided and should be ventilated to ensure it is kept fresh and dry.

Refrigerators or other low temperature food storage equipment

must be provided.

14. **Sanitary facilities**

Hot showers should be provided on vessels equipped with crew quarters. The sanitary facilities, washbasins and showers, where appropriate, must be properly installed, equipped and ventilated. Toilets must be provided, and should be in a separate room from the other sanitary facilities.The sanitary facilities must be accessible directly from the crew quarters without having to go out on deck.

15. **Accommodation ladders and gangways**

An accommodation ladder, gangway or other similar equipment providing an appropriate, safe means of boarding the vessel must be available.

16. **Noise**

Without prejudice to national regulations transposing Directive 86/188/EEC[7] and applicable to workers at work, noise levels in the crew quarters (particularly cabins) and the sanitary facilities must be compatible with the purpose for which such areas are used.

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(7) OJ L 137 of 24.5.1986

ANNEX II

MINIMUM SAFETY AND HEALTH REQUIREMENTS FOR FISHING VESSELS ALREADY IN USE, AS REFERRED TO IN ARTICLES 5 AND 7 OF THE DIRECTIVE

1. Preliminary note

The obligations laid down in this Annex apply whenever required by the features of the workplace, the activity, the circumstances or a hazard foreseeable on board a fishing vessel.

2. Stability and solidity

2.1. The hull, deckhouse superstructures, engine casing, companionways and other structures of the vessel, together with its fittings, must be sufficiently solid to enable it to withstand all foreseeable conditions in the service for which it is intended.

2.2. If a vessel is intended for use in ice, its hull must be strengthened to take account of the anticipated sailing conditions and the area of deployment.

2.3. All vessels must be sufficiently stable when intact in the conditions of service for which they are intended.

2.4. Any person likely to command a vessel must be familiar with the parameters governing the stability of that vessel so that he can maintain stability at all times when the vessel is laden and during fishing operations. Information on the vessel's stability must be available on board and must be accessible to the men on watch.

3. Electrical installations

Electrical installations must be designed and constructed so as not to present any danger and so as to provide:

- protection for the crew and vessel from electrical hazards;
- the services necessary to maintain the vessel in normal operational and habitable conditions without having recourse to an emergency power supply, and
- the services essential for safety if the main electrical power source fails.

An emergency source of electrical power must be provided outside the engine room and be so arranged as to ensure its functioning in the event of fire or other causes of failure of the main electricity supply.

The emergency source must be capable of providing power simultaneously for:

- internal communication equipment, fire detection systems and signals which may be required in an emergency;
- the navigation lights if solely electrical and the emergency lights aboard;
- the emergency fire pumps or bilge pump, where present,

for at least three hours, to give the rescue services time to reach the vessel.

Main and emergency switchboards must be located in different places so that they cannot all be accidentally exposed to flooding or fire.

4. Emergency escape routes and exits

4.1. Emergency escape routes and exits must remain clear and lead as directly as possible to the open deck or to a safe area and thence to the survival craft so that fishermen can evacuate workstations and living quarters quickly and safely.

4.2. The number, distribution and dimensions of the emergency escape routes and exits must depend on the maximum potential number of persons present.

4.3. Emergency doors and other emergency exits must be adequately watertight and fire resistant for their location and particular function.

Emergency doors should be operable from both sides easily and immediately by any person who may require to use them in an emergency.

4.4. Specific emergency escape routes, facilities and exits must be indicated by signs in accordance with national regulations transposing Directive 77/576/EEC into law.

Signs must be placed at appropriate points and be made to last.

4.5. The emergency escape routes, facilities and exits, and the traffic routes and doors giving access to them, must be free from obstruction so that they can be used at any time without hindrance.

4.6. Emergency escape routes, facilities and exits requiring illumination must be provided with emergency lighting of adequate intensity in case the lighting fails.

5. Fire detection and fire fighting

5.1. Depending on the dimensions and use of the vessel, the equipment it contains, the physical and chemical properties of the substances, products and materials present and the maximum potential number of people present, the crew accommodation and interior workplaces including the fish-hold, where necessary, must be equipped with appropriate fire-fighting equipment and, as necessary, with fire detectors and alarm systems.

5.2. Non-automatic fire fighting equipment must be easily accessible and simple to use.

The equipment must be indicated by signs in accordance with the national regulations transposing Directive 77/576/EEC into law.

Such signs must be placed at appropriate points and be made to last.

6. Ventilation of enclosed workplaces

Steps must be taken to see to it that there is sufficient fresh air in enclosed workplaces, having regard to the working methods used and the physical demands placed on the fishermen.

If a ventilation system is used, it must be maintained in working order.

Any breakdown must be indicated by a control system where this is necessary for fishermen's health.

7. **Room temperature**

The temperature in living quarters, working areas, sanitary facilities and first-aid rooms must be appropriate to the particular purpose of such areas.

8. **Natural and artificial lighting of working areas**

8.1. Where workplaces do not receive sufficient natural light they must be equipped with artificial lighting suitable for the operation in hand, without placing the fishermen's safety and health in danger or jeopardizing other vessels.

8.2. Lighting installations in areas containing workplaces, stairs, ladders, and in passageways must be placed in such a way that there is no risk of accident to the fishermen and no hindrance to the navigation of the vessel.

8.3. Workplaces in which fishermen are especially exposed to risks in the event of failure of artificial lighting must be provided

with emergency lighting of adequate intensity.

9. Floors, walls and ceilings of rooms

9.1. The floors of workplaces must be provided with non-slip surfacing and kept clear and free of obstacles.

Rooms containing workstations must be adequately insulated and soundproofed, bearing in mind the type of tasks involved and the physical activity of the fishermen.

9.2. The surface of floors, walls and ceilings in workplaces must be such that they can be cleaned or refurbished to an appropriate standard of hygiene.

10. Doors

10.1 The position and number of doors in watertight bulkheads and weatherproof enclosed superstructures should be reduced to the

minimum compatible with the general arrangement and operational needs of the fishing vessel; openings must be fitted with appropriate means of sealing them off.

10.2 Doors and in particular sliding doors, where such have to be used, must function without risk of accident to the fishermen, especially in adverse weather and sea conditions.

11. Traffic routes - danger areas

11.1 Passageways, trunks, the outer part of deckhouses and all traffic routes in general must be equipped with guard rails, grab rails and lifelines or other means of ensuring the safety of the crew in the course of its activities on board.

Traffic areas around the foot and the top of ladders and stairways must be provided with non-slip surfacing.

11.2 Fixed ladders and stairways must be of adequate size and strength, with non-slip rungs and steps and handrails. If the top of the ladder on the upper deck leads into a trunk, a landing shall be provided. If the ladder leads onto an opening on the upper deck, the hand-rails must be extended to meet the guard rail protecting the opening on the upper deck.

11.3 If there is a risk that fishermen may fall through openings in the deck, or from one deck to another, adequate protection should be provided, wherever possible in the form of guard rails of adequate height (in all cases over 1 m).

11.4 Effective bulwarks must be installed on all exposed parts of the working deck of an adequate height to protect the crew from water washing onto the deck, taking into account the state of the sea and the weather conditions in which the vessel may be used. The bulwarks must be fitted with scuppers or other similar devices to enable water to drain away quickly.

Fixed bulwarks must be high enough to protect fishermen from falls and in all cases higher than 750 mm.

However, if bulwarks of such a height may constitute a hindrance to fishing operations on any part of the deck, other arrangements must be made providing the same degree of safety.

12. Layout of the workstations

12.1 Non-slip flooring must be provided in the fishing gear and catch handling areas, the engine room, the workshops, the galley and other working areas.

12.2 Working areas must be kept clear, must be protected against the sea and must provide adequate protection for seamen against falling on board or overboard.

Handling areas shall be sufficiently spacious, in terms of both height and surface area.

12.3 Where the structure of the vessel allows, the controls for the hauling gear must be installed in an area sufficiently large to enable operators to work unhindered.

The hauling gear must also have automatic stop facilities to prevent improper use, and emergency stop facilities.

12.4 Where the structure of the vessel allows, the hauling gear operator must have an adequate view of the hauling gear and the men at work.

If the hauling gear is controlled from the bridge, the operator should also have a clear view of the men at work, either directly or via any other suitable medium.

12.5 A reliable comunication system shall be used between the bridge and the working deck.

12.6 Contact with bare ropes and warps and with moving parts of the equipment must be minimized by installing protective devices.

Controls must be installed for moving masses, particularly on trawlers :

- devices to immobilize the otter boards,
- devices to control the swinging motion of the codend.

13. Accommodation

13.1 The crew's accommodation should be designed in such a way as to minimize noise, vibration, the effects of speed and unpleasant odours from other parts of the vessel; appropriate lighting must be provided.

13.2 Refrigerators or other low temperature food storage equipment must be provided.

13.3 A toilet and washbasin, and, where possible, a shower, must be properly installed and ventilated.

14. Accommodation ladders and gangways

An accommodation ladder, gangway or other similar equipment providing an appropriate, safe means of boarding the vessel must be available.

ANNEX III

MINIMUM SAFETY AND HEALTH REQUIREMENTS
CONCERNING THE EMERGENCY ESCAPE AND SURVIVAL EQUIPMENT
REFERRED TO IN ARTICLES 4, 5, 6 AND 7

1. Fishing vessels travelling further than 20 nautical miles from the nearest coast must carry a hydrostatically activated emergency position-indicating radio beacon operating on the international distress frequency (406.025 MHz) and coded in accordance with the vessel's call sign. The radio beacon must be easily transferable to any group lifesaving equipment used.

2. Every vessel must carry sufficient life rafts or lifeboats to accommodate everyone on board, and they must be located in places from which they can be launched safely simply by dropping, without any vertical or horizontal obstacles between them and the water; it must also be possible to board them easily, quickly and safely.

3. The life rafts and lifeboats must be designed in such a way that they can be boarded easily and quickly, located visually in daylight and at night and located by radar. They should be equipped with:

- a boat hook (on craft other than dinghies) and ropes,
- oars and rowlocks, including spares

- a three-day supply of food and drinking water
- adequate survival equipment and instructions on survival
- a watertight medicine chest which fulfils the minimum category D requirements given in Annex II of the Council Directive on the minimum health and safety requirements for improved medical treatment on board vessels.

A lifeboat drill must be carried out at least once every three months.

4. Life buoys, inflatable arm bands and immersion suits must be available in sufficient number and easily and quickly accessible. Hand rails or handles must be positioned near immersion suits to help those putting them on.

ANNEX IV

MINIMUM SAFETY AND HEALTH REQUIREMENTS CONCERNING THE PERSONAL PROTECTIVE EQUIPMENT REFERRED TO IN ARTICLE 7

1. A tabard incorporating floats and a harness must be used if the collective protection equipment such as bulwarks, guard rails, safety loops and hand rails does not provide an acceptable level of safety for work carried out on the open deck.

2. Personal protective equipment in the form of clothing or worn over clothing must be in bright colours, contrasting with the marine environment and clearly visible in the dark.

3. If personal equipment is used to protect the head or eyes, it must be securely attached to the head.

SECTION 1: FINANCIAL IMPLICATIONS

1. TITLE OF THE ACTION: Proposal for a Council Directive concerning the minimum health and safety requirements for work on board fishing vessels.

2. BUDGET ITEMS CONCERNED

B3-4310: Measures in the field of safety, hygiene and health protection at work, including specific measures for the completion of the internal market.

A 2510: Committees whose consultation is compulsory (Technical Adjustments Committee referred to in Article 17 of Directive 89/391/EEC).

A 2531: Advisory Committee on Safety, Hygiene and Health Protection at Work.

3. LEGAL BASIS

Article 118a of the EEC Treaty.

4. DESCRIPTION OF THE ACTION

4.1. Specific objectives of the action

4.1.1. Objectives of the proposal for a Directive

The aims of the proposal are:

- to promote better health and safety conditions on board fishing vessels;
- to deal with the risks which may arise from the free movement of workers;
- to encourage the provision on board of suitable emergency escape and survival equipment and the use of appropriate personal protective equipment for the specific requirements of work at sea.

4.1.2. Characteristics of the proposal for a Directive (particularly those with financial implications)

4.1.2.1. The proposal, and in particular its annexes, is to be adapted and expanded to give further details of certain aspects relating to the use of safety and/or health signs.

4.1.2.2. The proposal requires the Member States to forward to the Commission details of the national legislation to be introduced in implementation of the proposal and reports on the progress of such legislation.

4.1.2.3. The proposal also provides for a Committee to assist the Commission with additional work.

It is the additional activities already scheduled or to be planned subsequently which have financial implications.

4.2. Duration

Unspecified.

4.3. Target population

The sea fishing industry.

5. CLASSIFICATION OF EXPENDITURE

5.1. Non-compulsory expenditure.

6. NATURE OF EXPENDITURE

6.1. 100% finance.

7. FINANCIAL IMPACT

7.1. Method of calculation.

7.1.1. Additional activities to be carried out after the Directive is adopted

a) monitoring the application of the Directive in the Member States

b) revision of the annexes

c) consultation of experts

d) operation of the Technical Adjustments Committee

e) consultation of the Advisory Committee on Safety, Hygiene and Health Protection at Work.

7.1.2. Types of activities with financial implications generated by point 5.1

These include:

* study and/or services contracts to

  - compare and evaluate the data received by the Commission;

  - study the problems posed by the application of the Directive;

  - study the problems associated with the annexes and prepare amendments to them.

* expenses for meetings with experts

* operating costs for the Technical Adjustments Committee

* costs of consulting the Advisory Committee on Safety, Hygiene and Health Protection at Work.

7.1.3. Calculation of expenditure

Since the number and scale of the additional activities involved are not known, it is impossible to calculate the exact expenditure required.

Costs are calculated on the basis of a "man/month" unit, which currently stands at ECU 4 000.

The cost of consulting a government expert has been calculated at ECU 420, or ECU 545 for a non-government expert (per day). The costs will be spread over a number of years and will be progressive. The figures given in paragraph 7.3 are overall estimates.

For budget item A 2510 (Technical Adjustments Committee), the figure covers two meetings of group 3 experts (government experts) in 1994, then three meetings per year from 1995.

For item A 2531 (Advisory Committee), the figure covers two meetings per year of an ad hoc group of 12 members, including four government experts. The meetings will commence in 1995.

7.2.

7.3. Schedule of commitment appropriations (CA) and payment appropriations (PA)

Item B3-4310

The appropriations allocated for this action will be determined annually on the basis of availability and the appropriations set aside under the budget procedure for actions covered by this item.

The total amount considered necessary for 1993 is ECU 250 000. From 1994 the appropriations allocated will develop in proportion to those allocated for all the actions covered by item B3-4310.

Item A 2510

	CA (ECU)	PA (ECU)
1993	----	----
1994	20 000	20 000
1995	30 000	30 000
1996	30 000	30 000
1997	30 000	30 000
	110 000	110 000

Item A 2531

	CA (ECU)	PA (ECU)
1993	----	----
1994	----	----
1995	12 000	12 000
1996	12 000	12 000
1997	12 000	12 000
	36 000	36 000

8. FRAUD PREVENTION

Not applicable.

SECTION 2: ADMINISTRATIVE EXPENDITURE

1. STAFF REQUIRED TO WORK EXCLUSIVELY ON THE ACTION

From 1993, one full-time grade A official, one full-time grade B official and one full-time grade C official.

These staff will either be obtained through internal redeployment, or will be provided for in the Commission's resource planning.

2. STAFF COSTS REQUIRED

Expenditure for the staff requested in paragraph 1 is estimated at ECU 240 000 per year from 1993 onwards. This will be covered by appropriations under Part A of Section III of the General Budget.

SECTION 3: COST-EFFECT ANALYSIS

1. AIMS AND COMPATIBILITY WITH FINANCIAL PLANNING

1.1. Specific objective of the proposed action

Implementation of the proposal for a Directive.

1.2. Is the action covered in the DG's financial planning for the years in question?

Yes.

1.3. Corresponding general objective in the DG's financial planning

Health and safety at work.

2. JUSTIFICATION OF THE ACTION

a) Cost

The cost is much the same as that of similar actions relating to other proposals for Directives. Only the expenditure under item B3-4310 (ECU 250 000 in 1993) is slightly higher because of the technical nature of the field in question.

b) Secondary effects

The proposal for a Directive is intended to reverse the traditional approach to safety where vessel safety comes before the safety of the crew, unless the vessel is in danger, in which case the safety of the emergency equipment is considered; now, instead, the safety of the men at work is to be put before the safety of the vessel, since the vessel is actually the capital of the owner (on which he usually receives a return of 50-65% of the catch sale). Measures to improve vessel safety could therefore be put in a different category from those designed to improve crew safety.

c) Multiplicator effects

There may be multiplicator effects in the Member States along the same lines as the secondary effects described above.

3. MONITORING AND EVALUATION OF THE ACTION

3.1. Not applicable.

3.2. Not applicable.

3.3. Not applicable.

IMPACT ASSESSMENT FORM

THE IMPACT OF THE PROPOSAL ON SMEs

****

Title of proposal:

Proposal for a Council Directive concerning the minimum health and safety requirements for work on board fishing vessels.

Reference No: 349.1

The proposal

1) **Justification of the proposal with regard to the principle of subsidiarity - Main objectives**

a) Existing national legislation on health and safety on board fishing vessels has all been transposed from a small number of conventions or other instruments drawn up by international organizations. An analysis of the national legislations of the different Member States shows that there are fairly major discrepancies. In addition, most of the legislation makes little or no provision for occupational safety on board, concentrating instead on vessel safety, safe navigation and emergency escape equipment. Accident statistics for the Community show that half of all fatal accidents in the fishing industry are occupational accidents.

b) Now that workers have freedom of movement, they must be guaranteed equal protection on vessels from different countries. Yet much of the legislation in a number of Member States does not cover small vessels.

c) Accident statistics show that, of all the major industries, sea fishing is the most dangerous, with on average ten times more fatal accidents than other high-risk sectors such as mining, construction and agriculture. The statistics also show that there is a higher incidence of accidents on small vessels.

Impact on business

2) **Firms affected**

a) All firms operating fishing vessels over 12 m long (in practice all vessels operated by more than one person) will be affected.

b) Sizes of business:

see Annex 1.

Almost all fishing firms can be classified as SMEs.

c) Geographical distribution:

The whole of the Community's coastline, but more especially the Atlantic coast of the Iberian peninsula, Brittany and the English Channel, North Sea and Adriatic coasts.

3) **Requirements for firms**

New vessels must comply with all, and older vessels with some, of the minimum requirements; older vessels undergoing subsequent alterations must comply with the minimum requirements applicable to new vessels. These requirements relate to factors such as solidity and stability, electrical installations, ventilation, emergency escape routes, workstation design, etc.

The Directive also requires detailed reports to be forwarded to the maritime authorities on any occurrences at sea which affect the health and safety of the fishermen; owners must fulfil certain requirements relating to technical maintenance and cleaning; fishermen must be consulted about and given information and suitable training on health and safety on board vessels, and any person likely to command a vessel must be given detailed training on health and safety conditions.

4) What economic effects is the proposal likely to have?

On employment

The Directive will not come into force until 1 January 1995, and it is difficult to anticipate the impact it may have on employment at that time. Since 1983 the European Community has pursued a policy of voluntarily reducing fishing capacity in line with the resources available (catch quotas for different countries and fishing zones), and this will be reflected over the next few years in the disappearance of a considerable proportion of the fishing fleet.

Multiannual guidance programmes (MGPs)

First MGP 1987-1991

Objective: Overall reduction of 3% in gross register tonnage (GRT) and 2% in engine capacity (KW)

Second MGP 1992-1996

The objectives will not be defined in detail until the end of 1991, but they will probably include a minimum reduction of 10% in engine capacity by the end of 1996, especially as not all the reductions scheduled under the first programme have been implemented in practice.

Whatever the case may be, the Directive will have considerably less effect on employment than the policy of reducing capacity, particularly since the first vessels to go will be the oldest and therefore those which are furthest from complying with the safety requirements laid down in the Directive.

The Directive itself would affect employment only if it proved necessary to take other vessels out of service because they could not be adapted. This is considered highly unlikely.

On investment and competitiveness

Figures supplied by representatives of the Member States indicate that the extra cost involved could be 3-5% of the value of a new vessel, but up to 15% of the market value of older vessels. Soundproofing will account for most of the extra cost for new vessels.

However, the extra expenditure required will be largely offset by lower operating costs resulting from improved safety on board. The few fishing firms which have tried to improve safety on board over the last few years have found that their position has improved against their immediate competitors.

A further consideration is that the direct and indirect cost of maritime accidents is very high. In the United Kingdom the cost of locating and rescuing fishing vessels at sea alone is the equivalent of 2% of the catch value.

To make it easier to adapt fishing vessels which have already been commissioned, there is a transition period of three years from the date on which the provisions of the Directive enter into force for new vessels.

5) The proposal does not contain any specific provisions on SMEs since these make up most of the sector.

Consultation

6) **List of organizations consulted**

a) Joint Committee on Social Problems in Sea Fishing.
Generally favourable reaction, with certain reservations on the part of the owners. The Committee's observations were taken into account in drafting the proposal.

b) Advisory Committee on Safety, Hygiene and Health Protection at Work (tripartite: government representatives, employers and workers): generally favourable opinion. The Committee's observations were taken into account in drafting the proposal.

In both cases reservations were expressed about the fact that the proposal does not cover self-employed workers, which legal grounds relating to Article 118a and the framework Directive had ruled out. Some owners would have preferred the Directive to cover vessels over 13.5 m or 15 m only.

DISTRIBUTION OF FLEETS BY VESSEL SIZE 1986

COUNTRY SIZE in metres	FRG	FRANCE	ITALY	NETHERLANDS	BELGIUM	DENMARK	SPAIN	
9 – 11.9 m	107	2676	3251	30	2	652	16	
12 – 17.9 m	328	1242	2996	126	29	1006	1487	
18 – 23.9 m	84	520	1448	165	63	389	1117	
24 – 29.9 m	83	125	560	173	59	110	566	
30 – 35.9 m	25	72	140	187	46	140	279	
36 – 41.9 m	2	17	14	146	8	68	96	
42 m and +	17	90	64	37	0	23	170	
Total concerned	646	4742	8473	869	207	2388	3731	21056 0.33
0 – 8.9 m	281	9227	17661	55	0	482	0	
Length unknown	2	10	1083	135	0	384	11552	
Overall total	929	13979	27217	1059	207	3254	15283	63967

Source: EUROSTAT, FISH series, May 1991

PERCENTAGE DISTRIBUTION OF FLEETS BY VESSEL SIZE 1986

COUNTRY / SIZE in metres	FRG	FRANCE	ITALY	NETHERLANDS	BELGIUM	DENMARK	SPAIN
9 - 11.9 m	11.52%	19.14%	11.94%	2.83%	0.97%	20.04%	0.10%
12 - 17.9 m	35.31%	8.88%	11.01%	11.90%	14.01%	30.92%	9.73%
18 - 23.9 m	9.04%	3.72%	5.32%	15.58%	30.43%	11.95%	7.31%
24 - 29.9 m	8.93%	0.89%	2.06%	16.81%	28.50%	3.38%	3.70%
30 - 35.9 m	2.69%	0.52%	0.51%	17.66%	22.22%	4.30%	1.83%
36 - 41.9 m	0.22%	0.12%	0.05%	13.79%	3.86%	2.09%	0.63%
42 m and +	1.83%	0.64%	0.24%	3.49%	0.00%	0.71%	1.11%
Total % concerned	69.54%	33.92%	31.13%	82.06%	100.00%	73.39%	24.41%
0 - 8.9 m	30.25%	66.01%	64.89%	5.19%	0.00%	14.81%	0.00%
Length unknown	0.22%	0.07%	3.98%	12.75%	0.00%	11.80%	75.59%
Overall total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: EUROSTAT, FISH series, May 1991

FIGURES FOR THE EC FISHING INDUSTRY

COUNTRY	CATCH LANDED				FLEET		SEAMEN		Ratios per seaman	
	Tonnes	of which factory ships	ECU million	of which factory ships	Units	of which GRT	Number	of which full-time	Catch value (ECU 1000)	GRT
DENMARK	1868000	1470000	452		6605	123600	7317		61774	16.89
IRELAND	213000	13000	96		1600	41000	7000	3100	13714	5.86
FRG	169000	37000	119		719	60000	3091	1898	38499	19.41
UNITED KINGDOM	664000		578		8293	168439	22217	16976	26016	7.58
FRANCE	834000	63000	1211		19227	205016	19000		63737	10.79
PORTUGAL	331000	9000	312		8816	188064	40996		7610	4.59
SPAIN	1000000		1500		14418	421401	93500		16043	4.51
NETHERLANDS	450000		350		1076	171626	4000		87500	42.91
BELGIUM	30000	1000	70		205	25445	1271	1271	55075	20.02
GREECE	147000		429		15600	181109	40164	28114	10681	4.51
ITALY	365000		1254		25977	283624	54450		23030	5.21
EC	6071000		6371		102608	1869324	293006		21744	6.38

Source: EC – DATA ROOM DG XIV, June 1991

1989 except where stated (cf. below for corresponding columns)

DENMARK						1988	
IRELAND	1988	1988	1988	1986	1986	1986	1986
FRG						1987	
UNITED KINGDOM							
FRANCE	1988	1988	1988	1986	1986	1987	
PORTUGAL			1986				
SPAIN	1986		1986	1986	1986	1986	
NETHERLANDS	1986		1986	1988	1988		
GREECE				1986	1986		
ITALY				1988	1988	1988	

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