



PAS 72:2006

# Responsible Fishing - Specification of good practice for fishing vessels



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## Foreword

This Publicly Available Specification has been developed by the Sea Fish Industry Authority (Seafish) in collaboration with the British Standards Institution (BSI). Acknowledgement is given to the following organizations that were consulted in the development of this specification.

British Frozen Food Federation

British Retail Consortium

Food and Drink Federation

Marine Conservation Society

Moody Marine

National Federation of Fishermen's Organisations

South Devon Shell Fishermen Ltd

Sea Fish Industry Authority

Scottish Fishermen's Federation

Scottish Pelagic Fishermen's Federation

UK Association of Producer Organisations

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**Compliance with this Publicly Available Specification does not of itself confer immunity from legal obligations.**

This Publicly Available Specification is not to be regarded as a British Standard.

## Introduction

This Publicly Available Specification (PAS) was proposed through the Seafish Advisory Committee structure as a means of recognising responsible fishing practices for individual vessels operating in a mixed fishery, controlled under international agreements. It is meant to develop, promote and bring reward for good practice.

## 1 Scope

This publicly available specification (PAS) specifies requirements for vessel operations and traceability in the sea fishing industry. It specifies requirements relating to fishing practices, vessel criteria, crew competence, environmental considerations and record maintenance.

It is applicable to the supply chain from the fisherman to the point of first sale.

NOTE It is assumed in standardization that users of standards will comply with the law. This PAS does not therefore make it a requirement that users comply with particular legislation. Such matters are outside the remit of standardization.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

UK small cetacean bycatch response strategy. DEFRA, March 2003.

The United Kingdom Turtle Code. The Marine Conservation Society.

## 3 Terms and definitions

For the purposes of this PAS, the following terms and definitions apply.

### 3.1

#### **discard**

release or return of fish to the sea, dead or alive, whether or not such fish are brought fully on board a fishing vessel

NOTE Fish can be discarded for a variety of reasons such as having physical damage, being a non-target species for the trip, and compliance with management regulations such as minimum size limits or quotas.

[Adapted from FAO (1998): Guidelines for the routine collection of capture fishery data. FAO Fish. Tech. Paper, 382: 113 p]

### 3.2

#### **discharge**

any release, other than fish or fish parts, from a ship howsoever caused, including any escape, disposal, spillage, leakage, pumping, emitting or emptying

NOTE This includes substances that are hazardous to human health and / or to the marine environment. Examples of discharges are fuel oil, oily ballast, bilge water, exhaust gases, refrigerants.

[Adapted from the MARPOL: International Convention for the Prevention of Pollution from Ships, 1973, Attachment 1]

### 3.3

#### **environmentally friendly**

actions whose implied consequences do not include an unacceptable, particularly irreversible, environmental impact

[Adapted from FAO Fisheries Glossary]

### 3.4

#### **fish**

all species harvested from the sea

NOTE For the purposes of this PAS, the term “fish” is used to include all species harvested from the sea, including crustaceans, shellfish, etc.

### 3.5

#### **marine litter**

debris, primarily man-made, and/or waste material that is found in the sea

### 3.6

#### **non-commercial species**

catches from fishing activity which have no, or very little current economic value to the vessel

### 3.7

#### **fish quality**

totality of features and characteristics of a product that bear on its ability to satisfy stated or implied needs

NOTE In terms of fish quality, it is the combined state of freshness, condition, appearance and presentation of the fish. Consumers and buyers from the marketplace consider odour, shelf life, fish appearance, packaging and presentation in order to help them determine what condition the fish is in.

[Adapted from the UN Atlas of the Oceans, definition of fish quality]

### 3.8

#### **selective gear**

gear allowing fishermen to capture few, if any, species other than the target species

[Taken from the FAO Fisheries Glossary]

### 3.9

#### **sustainable**

characteristic of resources that are managed so that the natural capital stock is non-declining through time, taking account of natural population dynamics, while production opportunities are maintained for the future

[Taken from the FAO Fisheries Glossary]

### 3.10

#### **target species**

species that are primarily sought by the fishermen in a particular fishery

NOTE Target species are the subject of directed fishing effort in a fishery. There may be secondary as well as primary target species.

[Adapted from the FAO Fisheries Glossary]

### **3.11**

#### **traceability**

ability to determine the transfer of fish through the distribution chain from point of capture to point of first sale

NOTE Fish marketing regulations require the original details of the product (commercial designation, production method, catch area [FAO] and scientific [Latin] name) to be traced to its original source but not to any stages of distribution. These details need to travel with the product by means of direct labelling, or by commercial documents accompanying the product.

[Adapted from Seafish Traceability Update. 17<sup>th</sup> Nov. 2004]

### **3.12**

#### **undersized**

fish caught at a size smaller than the minimum size limit established by regulation

[Taken from the FAO Fisheries Glossary]

## **4 Crew competence**

### **4.1 General**

All crew members shall be competent to carry out their duties onboard ship. As a minimum, this competence shall be demonstrated for all crew members by the completion of the safety training on basic sea survival, fire fighting, first aid and safety awareness.

In addition, skippers, mates and engineers shall hold the relevant MCA Certificates of Competency.

### **4.2 Training**

#### **4.2.1 Training records**

Records shall be kept of all on-the-job training and of all formal training courses attended by individual members of the crew.

#### **4.2.2 Hygiene**

All crew members shall have received instruction in basic food hygiene and records shall be kept of all such training.

NOTE The training should ensure that all crew members have a clear understanding of the importance of high standards of cleanliness and the means of achieving them.

All crew members shall be instructed in the vessel cleaning regimes to be followed during fishing operations and when the vessel returns to port (see **6.3.1**).

#### **4.2.3 Fish handling**

All crew members shall have received instruction in the vessel's care of the catch quality procedures. Records shall be kept of all such training.

#### **4.2.4 Hazard analysis**

Skippers shall be aware of, and shall comply with, the techniques and the principles of hazard analysis as they apply to the reduction of risk of contamination to the fish.

NOTE For information on the principles and techniques of hazard analysis, please refer to the relevant parts of the Seafish Good Practice Guides.

#### **4.2.5 Responsible fishing**

Skippers shall be aware of, and shall comply with, the requirements on responsible fishing specified in Annex A, as it applies to their particular fishing operations.

NOTE Annex A is based on the Food and Agriculture Organization of the United Nations “Code of conduct for responsible fisheries”, 1995.

#### **4.2.6 Discharges at sea**

All crew members shall be instructed in the policy on allowable discharges at sea for the individual vessel concerned (see **5.3**).

### **5 Environmental considerations**

#### **5.1 Good practice**

In all types of fishing the crew shall make all efforts to conserve the marine ecosystem by following current good practice. Skippers shall be aware of, and shall comply with, the requirements on good environmental practice specified in Annex A, as it applies to their particular fishing operations.

Where good practice documents are published after the publication of PAS 72, the latest publication shall be regarded as the current good practice, once it has been approved by Seafish.

#### **5.2 Marine litter**

Fishermen shall make every effort to avoid creating marine litter as a result of their activities at sea.

Any marine litter produced or collected as a result of fishing operations shall be returned to port for safe disposal where it is physically safe and possible to do so. Fishermen shall recover other persistent garbage from the sea as opportunities arise and prudent practice permits.

Fishermen are encouraged to participate in litter surveys and wider marine surveys where available.

#### **5.3 Discharge control**

All vessels shall follow a documented procedure that specifies their policy and practice on the control of discharges at sea. The procedure shall include, as a minimum, procedures to minimize the disposal of oily waste, and to ensure safe and efficient handling and storage of shipboard rubbish in order to minimise marine litter.

NOTE Attention is drawn to the levels set by MARPOL 73/78.

## 5.4 Retrieval of gear

All crews shall take measures to minimise the loss of gear and make every effort to retrieve any gear lost, provided it is safe to do so.

If the crew retrieve any third party gear during fishing operations, it shall be dealt with in accordance with 5.2.

## 6 Fishing practices

### 6.1 Capture

#### 6.1.1 *Selective fishing*

Selective fishing practices and gear shall be used consistent with the principles of responsible fishing. It shall be appropriate for the target species and/or size grades targeted, and shall be appropriate to minimize discards in accordance with current good practice for the area of fishing concerned. Live discards shall be returned to the sea as quickly and as carefully as possible.

NOTE For general guidance on selective fishing in the context of responsible fishing, see Annex A.

#### 6.1.2 *Cetaceans*

Vessels shall follow a documented policy on the avoidance of the capture of cetaceans for fisheries where a cetacean by-catch has been identified. The policy shall be based on the "UK small cetacean by-catch response strategy".

NOTE Work is ongoing on the subject of measures to reduce cetacean by-catch. Skippers should keep abreast of the results of the research and adopt good practice as soon as it has been agreed by Seafish.

#### 6.1.3 *Sea birds*

Where appropriate, vessels shall follow a documented policy on the avoidance of the capture of sea birds.

#### 6.1.4 *Turtles*

Any sightings of turtles and/or the occurrence of a turtle entangled in fishing gear shall be reported to the relevant body in accordance with "The United Kingdom Turtle Code". Fishermen shall follow the guidelines of the code if handling of the animal is necessary due to entrapment in gear.

### 6.2 Storage

**6.2.1** Fish holds and containers used for the storage of the catch shall allow for the efficient drainage and removal of melt-water and drip loss. The drainage system shall allow melt water to drain away into a sump from where it can be pumped overboard. The sump shall be cleaned on a regular basis.

**6.2.2** Unless they are being retained for the live market, fish shall either be:

1. chilled, iced or frozen at sea. Chilling, icing and freezing shall be done as soon as practicable after catching; or
2. landed within 4 hours of being caught (see 6.2.3).

Chilling, icing and freezing practice shall be in accordance with current good practice.

A log shall be kept of the temperature in the chilling room and frozen storage areas. Temperatures shall be recorded at least twice daily. The records shall be kept for at least 12 months.

If ice is used, it shall be made from potable water or clean sea water. When storing ice, it shall be held in clean surroundings and stored away from the elements. It shall not be left open to contamination from birds and the environment on the deck, or to contamination from crew, chemicals, glass or other substances in the hold. Ice shall be made, transported and handled under hygienic conditions to avoid its contamination.

Where vessels freeze fish at sea, the fish shall be stored at an even temperature below  $-20^{\circ}\text{C}$ . Storage rooms for frozen fish shall be equipped with a temperature recording device which is easily visible. Temperature records shall be kept relating to the periods of time during which frozen fish are stored.

**6.2.3** If fish are to be stored for more than 4 hours on un-decked boats and boats without fish-rooms, suitable containers shall be used with the addition of ice to maintain chill temperatures. If chilled storage is not possible in suitable containers, all fish shall be landed within 4 hours of catching.

NOTE 1 Seafish strongly recommend that fish are chilled and kept in insulated containers even if they are to be kept on the vessel for less than 8 hours, due to the risk of deterioration in the quality of the fish, particularly during the warmer months of the year.

NOTE 2 For information on icing on small vessels, see the SFIA publication "Iced storage of fish on small inshore vessels".

**6.2.4** Fish shall be protected from the elements and from sources of contamination as soon as possible.

## **6.3 Hygiene**

**6.3.1** Vessels shall have a fully documented cleaning regime for food handling areas, covering both the operations whilst at sea and when the vessel returns to port. The cleaning agents to be used and their application rates shall be specified in the cleaning regime information. The cleaning agents shall be food safe.

NOTE The regime should include a requirement that prior to the start of any fishing trip, the skipper or a designated crew member should check the standard of hygiene for all fish handling and storage areas.

**6.3.2** At the end of each fishing trip and after landing of the catch, all fish handling and stowage areas, equipment, etc. shall be thoroughly cleaned and disinfected. Cleaning products and potentially toxic substances shall be stored separate from fish handling and fish storage areas.

**6.3.3** Effective measures shall be taken to protect the fishing vessel from the infestation of any pests. If evidence of their presence is noted appropriate action shall be taken.

NOTE Measures are detailed in the relevant Good Practice Guides published by Seafish.

**6.3.4** Vessels shall have a supply of clean seawater for washing fish and for cleaning down surfaces, and for the refrigerated sea water (RSW) or chilled sea water (CSW) tanks, if appropriate.

Deck hoses shall be stowed when not in use and kept clean, and shall be of sufficient length to easily reach all areas that need to be washed down. The water pressure shall be sufficient for effective wash down.

**6.3.5** If the vessel uses bait in its fishing operations, containers for the bait shall be clearly marked as such and shall not be used for any other purpose. Bait shall be held separate from the catch and in such a manner that it cannot contaminate the catch.

**6.3.6** Ice machines on board vessels shall be operated in such a way as to avoid sources of contamination and shall be regularly cleaned.

Containers and shovels used to store and dispense ice shall be regularly cleaned and shall not be used for any other purpose.

**6.3.7** Gloves and protective clothing including waterproofs shall be cleaned at least daily.

## **6.4 Quality**

### **6.4.1 Hazard analysis**

Skippers shall minimise the chemical and microbiological contamination risk to the catch by adopting the techniques of hazard analysis (see 4.2.4).

### **6.4.2 Handling practice**

**6.4.2.1** Handling, sorting and stowage of the catch shall be commenced and completed as soon as practically possible after taking the catch onboard.

**6.4.2.2** Fish washers and/or deck hoses shall be supplied with clean seawater that is used exclusively for the washing of the catch.

**6.4.2.3** If gutting operations are carried out at sea, the vessel shall, where appropriate size, design and layout allow, be equipped with a dedicated chute for the collection and/or disposal of offal.

**6.4.2.4** Fish containers, knives, cutting boards, fish washers, hoppers, tables and any other equipment coming into contact with the fish shall be made of durable non-toxic materials, such as marine grade stainless steel, marine grade aluminium and food-grade plastics.

NOTE The use of wood is not recommended.

The presence of glass in fish handling and holding areas shall be avoided where possible. Where it is unavoidable in certain items of equipment or fittings on the vessel, it shall be protected against damage. Regular checks shall be undertaken to ensure that glass material remains undamaged and intact.

If glass damage does occur, it shall be reported to the skipper. Any fish products that may have been contaminated from any such breakage shall be disposed of.

NOTE Damaged glass should be immediately removed and the area thoroughly cleaned.

No person shall be permitted to introduce items made from glass into the fish handling and storage areas.

**6.4.2.5** If the vessel is equipped with a refrigerated hold, the hold shall be running and stable at its suitable operating temperature before any product is stored in it.

If the vessel is not equipped with a refrigerated hold and does not have ice making machinery, a sufficient quantity of ice for the length of the trip shall be carried.

**6.4.2.6** All fish shall be handled and stowed before taking the next haul onboard. The fish handling area shall be cleaned between hauls.

NOTE This is particularly important for maintaining fish quality.

**6.4.2.7** Where the vessel has the capability to freeze all or part of the catch, the fish shall be fully processed and shall commence freezing within 4 hours of being taken onboard. The refrigeration equipment shall be capable of quickly freezing fish to a temperature below  $-20^{\circ}\text{C}$  within 3 hours.

## **6.5 Landing**

**6.5.1** All landing of product shall be carried out with care to prevent damage to the fish.

**6.5.2** During landing operations every reasonable measure shall be taken to protect the catch from contamination from the open environment.

**6.5.3** When the catch has been landed it shall be transferred to a place of storage that will maintain the product at a chilled temperature. If the place of storage is not refrigerated, adequate ice shall be used on the product to ensure it maintains a temperature of  $<5^{\circ}\text{C}$ .

## **6.6 Traceability**

Skippers, vessel owners and operators shall ensure that all fishing activities are carried out in a manner that ensures full traceability. Appropriate measures shall be in place to enable relevant information to be passed to the appropriate authorities in the event of a query. The information shall, as a minimum, include the following:

- vessel identity;
- date of landing;
- location of capture (ICES Division/Sub-area);
- species;
- weight.

NOTE For guidance on traceability, see Seafish Update, 17 November 2004.

## **7 Record keeping**

### **7.1 Crew**

A record shall be kept onboard the vessel of all crew members listing the following information:

- name;
- address;
- next of kin;
- emergency contact;
- blood group and any specific health issues.

A record shall be kept of all crew training (see 4.2.1).

## 7.2 Records and quota species

A record shall be kept of all fishing activity, including both quota and non-quota fishing (see 6.6). The record shall cover the following items:

- vessel identity;
- name of master;
- trip departure and return details;
- quantities (live weight) of fish caught on every day's fishing;
- position details of where fish caught (ICES Division/Sub-area).

The record shall be signed off daily and signed off for the trip.

NOTE One suitable format for the records is the EU Log Book.

## 8 Vessel criteria

### 8.1 Standards of finish

The areas of the vessel where fish are taken onboard, handled and stowed shall be fit for purpose such that they are easy to clean and drain freely. The surfaces of the vessel in these areas shall be constructed from waterproof, durable and smooth materials. If the vessel is of wood construction, the surfaces shall be regularly scrubbed clean and shall be free from splinters.

### 8.2 Contamination risk

The area of the vessel where fish are taken onboard, handled and stowed shall be clear of contamination from bilge water, sewage, exhaust emissions, fuel, lubricants or any other substances hazardous to human health.

Where painted surfaces are present, they shall not be in a blistered or flaking condition which constitutes a contamination hazard.

Lighting in fish handling and storage areas shall be suitably protected against breakage.

## **Annex A (normative)**

### **Responsible fishing operations**

#### **A.1 Background**

Harvesting of the world's seas has become a major source of food for humanity, and a provider of employment and economic benefit to those engaged in the supply of fish from the oceans. These marine resources, although renewable, are not infinite and need to be properly managed if the economic and social well-being of the growing world's population is to be sustained. Over-exploitation of some of the world's fish stocks has threatened the long-term sustainability of some fisheries and the contribution of those fisheries to food supply.

In 1991 the FAO Committee on Fisheries (COFI) recommended that new approaches to fisheries management embracing conservation and environmental, as well as social and economic, considerations were urgently needed. Hence the "Code of Conduct for Responsible Fisheries" was adopted in 1995.

Building on the framework of the FAO Code, the EU has produced the "European Code of Sustainable and Responsible Fisheries Practices", directed primarily at fishing operators.

The principles and guidelines set out in the following clauses have been drawn up using the format and context of both the EU and the FAO codes, presented in a form that is concise and applicable to fishing operators in the UK.

#### **A.2 General principles**

The following principles set out the context for what shall be done in order to fish in accordance with the concepts of responsible fishing and good environmental practices.

##### **A.2.1 Principle 1**

Fishermen shall acknowledge that conservation and sustainable use of marine resources is a shared responsibility, and requires a spirit of cooperation among all industry participants and with the appropriate regulatory authorities.

##### **A.2.2 Principle 2**

Fishermen shall take appropriate measures to ensure fisheries are harvested and managed responsibly to safeguard the sustainability of marine resources for present and future generations.

##### **A.2.3 Principle 3**

Taking into account the economic importance of the fisheries to industry participants and their communities, fishermen shall take appropriate measures to pursue the ecological sustainability of UK, EU and international fisheries.

##### **A.2.4 Principle 4**

To the extent practical, fishermen shall minimize unintended bycatch and reduce waste and adverse impacts on the marine ecosystems and habitats.

##### **A.2.5 Principle 5**

Fishermen, in association with other industry organizations, shall develop, maintain and promote public awareness and understanding of the issues surrounding responsible fishing and the measures taken by fishermen to conserve stocks and protect the environment.