



FAO
TECHNICAL
GUIDELINES FOR
RESPONSIBLE
FISHERIES

1

FISHING OPERATIONS

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 1996

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PREPARATION OF THIS DOCUMENT

On the basis of an Expert Consultation on Responsible Fishing, Sidney, British Columbia, Canada, 6 to 11 June 1994, draft guidelines with respect to fishing operations were developed for FAO by staff members of the Fishing Technology Service (FIIT), led by John Fitzpatrick, Director a. i. Fishery Industries Division.

In line with the recommendations of the Committee on Fisheries (COFI), these draft guidelines were submitted to the Technical Consultation on the Code of Conduct for Responsible Fishing (the Code), Rome, 26 September to 5 October 1994 for information. The draft also contained a list of Annexes some of which were available, either in a complete form or at the advanced stage of drafting, whereas others had still to be elaborated.

In parallel with the development of the Code, the International Maritime Organization (IMO):

- a) adopted the Torremolinos Protocol of 1993 relating to the Torremolinos International Convention on the Safety of Fishing Vessels, 1977;
- b) amended the Convention on the Training and Certification of Watchkeepers;
- c) developed a new Convention on the Training and Certification of Fishing Vessel Personnel; and
- d) amended the International Regulations for the Prevention of Collisions at Sea (on the recommendation of FAO).

As an integral part of the Code, the FAO adopted the “Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas” (the Compliance Agreement) that includes, *inter-alia*, the concept of the “*authorization to fish*”. The inclusion of this concept in Article 8 of the Code, Fishing Operations greatly facilitated the revision of Annexes III and IV to these guidelines.

These guidelines have been prepared taking into account the:

- a) report of the Expert Consultation on Responsible Fishing Operations, Sidney, British Columbia, Canada, 6-11 June 1994;
- b) elaboration of the Compliance Agreement;
- c) developments at the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks; and,
- d) the elaboration of the Code of Conduct.

Further Annexes on specific technical subjects are in preparation and these will be released in the form of a “Supplement to the Technical Guidelines on Fishing Operations” as and when they are completed.

These Guidelines are preliminary and will be evaluated and revised as information accumulates through their implementation.

FAO Fishing Technology Service.

Fishing operations.

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ABSTRACT

In accordance with the recommendations of the Committee on Fisheries (COFI), FAO prepared the first draft of the technical guidelines in relation to Fishing Operations, which were submitted to the Technical Consultation on the Code of Conduct for Responsible Fishing, Rome, 26 September to 5 October 1994. The draft was prepared taking into account the Declaration of Cancún, Agenda 21 of United Nations Conference on Environment and Development (UNCED) and the Report of the Expert Consultation on Responsible Fishing Operations, Sidney, British Columbia, Canada, 6 -11 June 1994.

Thereafter, the draft was revised taking into account, the negotiations at the UN Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks, the elaboration of the Code as well as developments at the International Maritime Organization (IMO) with regard to the Protocol to the Torremolinos International Convention on Fishing Vessel Safety and the new International Convention on Training, Certification and Watchkeeping for Fishing Vessel Personnel, 1995.

Technical Guidelines are given in support of the implementation of the Code in relation to fishing operations. These are addressed to States, international organizations, fisheries management bodies, owners, managers and charterers of fishing vessels as well as fishers and their organizations. Guidance is also given with respect to the general public.

Distribution:

All FAO Members and Associate Members
Interested Nations and International Organizations
FAO Fisheries Department
FAO Fisheries Officers in FAO Regional Offices
Interested Non-Governmental Organizations

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BACKGROUND

1. From ancient times, fishing has been a major source of food for humanity and a provider of employment and economic benefits to those engaged in this activity. However, with increased knowledge and the dynamic development of fisheries it was realised that aquatic resources, although renewable, are not infinite and need to be properly managed, if their contribution to the nutritional, economic and social well-being of the growing world's population was to be sustained.
2. The adoption in 1982 of the United Nations Convention on the Law of the Sea provided a new framework for the better management of marine resources. The new legal regime of the oceans gave coastal States rights and responsibilities for the management and use of fishery resources within their EEZs which embrace some 90 percent of the world's marine fisheries.
3. In recent years, world fisheries have become a dynamically developing sector of the food industry and coastal States have striven to take advantage of their new opportunities by investing in modern fishing fleets and processing factories in response to growing international demand for fish and fishery products. It became clear, however, that many fisheries resources could not sustain an often uncontrolled increase of exploitation.
4. Clear signs of over-exploitation of important fish stocks, modifications of ecosystems, significant economic losses, and international conflicts on management and fish trade threatened the long-term sustainability of fisheries and the contribution of fisheries to food supply. Therefore the Nineteenth Session of the FAO Committee on Fisheries (COFI), held in March 1991, recommended that new approaches to fisheries management embracing conservation and environmental, as well as social and economic, considerations were urgently needed. FAO was asked to develop the concept of responsible fisheries and elaborate a Code of Conduct to foster its application.
5. Subsequently, the Government of Mexico, in collaboration with FAO, organized an International Conference on Responsible Fishing in Cancún, in May 1992. The Declaration of Cancún endorsed at that Conference was brought to the attention of the UNCED Rio Summit in June 1992, which supported the preparation of a Code of Conduct for Responsible Fisheries. The FAO Technical Consultation on High Seas Fishing, held in September 1992, further recommended the elaboration of a Code to address the issues regarding high seas fisheries.
6. The One Hundred and Second Session of the FAO Council, held in November 1992, discussed the elaboration of the Code, recommending that priority be given to high seas issues and requested that proposals for the Code be presented to the 1993 session of the Committee on Fisheries.
7. The Twentieth Session of COFI, held in March 1993, examined in general the proposed framework and content for such a Code, including the elaboration of guidelines, and endorsed a timeframe for the further elaboration of the Code. It also requested FAO to prepare, on a "fast track" basis, as part of the Code, proposals to prevent reflagging of

fishing vessels which affect conservation and management measures on the high seas. This resulted in the FAO Conference, at its Twenty-seventh Session in November 1993, adopting the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, which according to FAO Conference resolution 15/93 forms an integral part of the Code.

8. The Code was formulated so as to be interpreted and applied in conformity with the relevant rules of international law, as reflected in the United Nations Convention on the Law of the Sea, 1982, as well as with the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, 1995 (UN Agreement) and in the light of *inter alia* the 1992 Declaration of Cancún, the 1992 Rio Declaration on Environment and Development, in particular Chapter 17 of Agenda 21.
9. The development of the Code was carried out by FAO in consultation and collaboration with relevant United Nations Agencies and other international organizations including non-governmental organizations.
10. The Code of Conduct consists of five introductory articles: Nature and Scope; Objectives; Relationship with Other International Instruments; Implementation, Monitoring and Updating; and Special Requirements of Developing Countries. These introductory articles are followed by an article on General Principles which precedes the six thematic articles on: Fisheries Management, Fishing Operations, Aquaculture Development, Integration of Fisheries into Coastal Area Management, Post-Harvest Practices and Trade, and Fisheries Research. As already mentioned, the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas forms an integral part of the Code.
11. The Code is voluntary. However, certain parts of it are based on relevant rules of international law, as reflected in the United Nations Convention on the Law of the Sea of 10 December 1982. The Code also contains provisions that may be or have already been given binding effect by means of other obligatory legal instruments amongst the Parties, such as the Agreement to Promote Compliance with Conservation and Management Measures by Fishing Vessels on the High Seas, 1993.
12. The Twenty-eighth Session of the Conference in Resolution 4/95 adopted the Code of Conduct for Responsible Fisheries on 31 October 1995. The same Resolution requested FAO *inter alia* to elaborate as appropriate technical guidelines in support of the implementation of the Code in collaboration with members and interested relevant organizations.

INTRODUCTION

1. OBJECTIVES, DEFINITIONS AND APPLICATION

1.1 Objectives

1. To ensure the long term sustainability of living marine resources so that these can be harvested by generations to come thus making a substantial contribution to world food security and employment opportunities is one of the long term objective of the Code. Article 8 of the Code further develops the provisions regarding fishing operations.
2. The immediate objective of the Technical Guidelines is to provide practical advice to implement provisions of Article 8 to ensure all fishing operations are conducted responsibly.

1.2 Definitions

3. For the purpose of these Guidelines, unless expressed otherwise; the following definitions are used:
 - a) **"Fishing vessel"** means any vessel used or intended to be used for the commercial exploitation of living marine resources, including mother ships and any other vessel directly engaged in such fishing operations¹;
 - b) **"Fisher"** means an individual who takes part in fishing conducted from a fishing vessel, platform (whether fixed or floating) or from the shore;
 - c) **"Owner"** means an individual or entity holding shares in a fishing vessel or fishing licence;
 - d) **"Manager"** means an individual or entity acting on behalf of the owner for the operation of a fishing vessel or a fishing operation;
 - e) **"Charterer"** means any individual or entity that leases a vessel for a fixed period of time or for a voyage;
 - f) **"Fisheries Protection Vessel"** means a vessel not engaged in commercial activities, deployed by a State, for the purpose of monitoring, control, surveillance and law enforcement; and is clearly identifiable being a government service;
 - g) **"Transshipment"** means that act of transferring the catch from one fishing vessel to either another fishing vessel or to a vessel used solely for the carriage of cargo.

¹ *Taken from the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (approved by the Conference of FAO, November 1993). It should be noted, however, the definition of a fishing vessel may vary from one agreement to another, and in some instances it is not defined as it is likely to become a controversial issue. Neither the UN Convention on the Law of the Sea, 1982, nor the UN Agreement contain a definition of a fishing vessel. Further, it should be noted also that definitions of fishing vessels in national laws concerning fishing are likely to be very wide indeed, and cover more than the definition taken from the Compliance Agreement.*

1.3 Application

4. The Guidelines may be applied by States on a voluntary basis to:
- a) to all fishing operations on all oceans, seas and inland waters;
 - b) fishers, owners, managers, masters of harbours for fishing vessels, and competent authorities for the purpose of fisheries management and maritime transport; and,
 - c) all fishing vessels and vessels engaged in the transshipment of fish. as defined in paragraph 3.

2. GUIDELINES FOR ALL STATES (Ref. Section 8.1 of the Code)

2.1 Those Engaged in Fishing

5. States should provide conditions for those engaged in fishing that encourage responsible fishing by ensuring that:
- a) the interests of those engaged in fishing are recognized and sufficiently secure to provide for their long term contribution to the health of fisheries resources and inter-generational equity;
 - b) incomes are sufficient to allow conservation and management measures to be imposed without causing undue financial hardship on fishers and fishing vessel owners;
 - c) matters concerning the safety and health of those engaged in the fishing industry are given due consideration by taking into account the provisions of the relevant ILO conventions, as well as the recommendations of its Committee on Conditions of Work and Service in the Fishing Industry; and,
 - d) provisions are made for the views of those engaged in fishing to be taken into account when management policies are being elaborated ².

2.2 Authorization to Fish

6. Within waters under their jurisdiction, States should ensure that only fishing operations allowed by them are conducted.
7. The authorization to fish should contain details of the fishing activity so authorized, as well as information regarding the names and addresses of those authorized and, where appropriate, technical information related to any fishing vessel involved. States should maintain a record, updated at regular intervals, of all authorizations to fish issued by them.

² *Partnerships between those involved in fishing and those responsible for fisheries management should be encouraged; further information is given in the guidelines on fisheries management.*

8. The authorization to fish should contain a condition that the recipient(s) will abide by the provisions of the Code where and as these relate to fishing operations.
9. The authorization to fish may also contain conditions concerning, *inter-alia*:
 - a) area to be fished, species to be fished and quota for the vessel or fisher;
 - b) type of fishing gear or fishing implements so authorized;
 - c) time/seasonal limitations; the need for certain classes of fishing vessels to be issued with a Certificate of Registry; and,
 - d) the limitation of navigational warranties.
10. States should establish systems for the monitoring, control and surveillance (MCS) and law enforcement of fishing activities and related operations that include, *inter-alia*:
 - a) the granting of powers to the officers appointed to carry out monitoring, control and surveillance activities³;
 - b) legal provision for action to be taken that is of sufficient gravity so as to be effective in achieving compliance with conservation and management measures;
 - c) appropriate marking systems for the identification of vehicles, vessels and aircraft authorized for monitoring, control and surveillance activities; and,
 - d) a communications network that would ensure that all those engaged in fishing are aware of regulations in force and the penalties for misconduct.

2.3 Education, Training and Certification

11. States should adopt systems of education and training programmes that would ensure that all those engaged in fishing operations are able to carry out their duties competently. In this respect they should be made aware of the provisions of the Code as well as relevant international conventions, legal instruments and codes of practice. These systems of education and training programmes would have to take into account the level of general education and the fishing activities to be carried out. It would be unreasonable to expect artisanal fishers to understand the provisions of legal instruments; on the other hand, those who expect to be placed in charge of large fishing vessels must have a knowledge of such instruments. The system would have to be developed in such a way that the older existing participants would not be disadvantaged. They should have the opportunity to attend upgrading courses and obtain dispensations. Therefore, any new requirements for certificates should include a "grandfather" clause.
12. States should also maintain records of certificates issued and that these records should be stored in a readily retrievable format. The entry in the record should give, *inter-alia*, the following information:

³ *Some countries find it appropriate to enter into a commercial form of contract for MCS purposes.*

- a) details of the issuing authority;
 - b) a description of the discipline covered by the certificate;
 - c) its validity and conditions attached with regard to its scope;
 - d) name, date of birth and nationality of the holder; and,
 - e) title, signature of the issuing officer and date of signature.
13. In this respect, it should be noted that the word "Certificate" is defined in the International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel (1995) as meaning, "a valid document, by whatever name it may be known, issued or recognized in accordance with the provisions of the Convention, authorizing the holder to serve as stated in this document or as authorized by national regulations."
14. States should ensure that measures applicable in respect of a person or persons charged with an offence relating to a fishing operation, should include provisions which may permit, *inter alia*, refusal, withdrawal or suspension of authorization:
- a) to fish; and,
 - b) to serve as masters or officers of a vessel.
15. With regard to masters or other officers of a fishing vessel, the measures taken should be entered in the record (mentioned in paragraph 12 above) of the offender and, as appropriate, in the record of service and/or on the certificate of competency held by the offender. The measures should be sufficiently transparent to ensure that a flag State (other than the State that issued the certificate) would also be fully aware of the action taken in this respect.
16. At the request of a flag State intending to employ foreign nationals, other States concerned should cooperate by providing information concerning the competence of their nationals.

2.4 Safety

17. States should ensure that all fishing operations are carried out in safety.
18. States should make arrangements together and with the appropriate international organization for the integration of fishing vessel operations into search and rescue (SAR) systems. For such purposes, and taking into account the size and types of fishing vessels in a fleet, as well as the likely disposition of individual vessels, States should give due consideration to the adoption of integrated safety systems, such as:
- a) the IMO Global Marine Distress and Safety System (GMDSS) the basic concept of which is that search and rescue authorities ashore, as well as shipping in the immediate vicinity of the ship in distress, will be rapidly alerted to a distress incident so that they can assist in a coordinated SAR;

- b) operation with the minimum of delay; the system also provides for urgency and safety communications and the promulgation of maritime safety information, navigational and meteorological warnings and forecasts and other urgent safety information to ships;
 - c) the International Telecommunications Union (ITU) system of communications for maritime mobile and maritime mobile-satellite services; and,
 - d) vessel position reporting systems.
19. States should also make safety arrangements, either individually or together as may be appropriate, for inland water fisheries⁴.
20. States should establish a system of forecasting and broadcasting through which fishers would be given information on weather and areas to be avoided.

3. GUIDELINES FOR FLAG STATES (Ref. Section 8.2 of the Code)

3.1 Flag Allocation, Authorization to Fish and Records

21. A flag State should establish a system to record details of vessels entitled to fly its flag whether through the process of the issue of a Certificate of Registry or other document in connection with the allocation of a flag or licence to fish. In addition, the system should allow ready comparison with the record of authorizations to fish (mentioned in paragraph 7) granted to fishing vessels. Since in many countries, the competent authority for the register of a fishing vessel is often different from the authority that would issue an authorization to fish there should be a link between both activities; this is particularly important in the case of vessels changing flags.
22. Further to the provisions of paragraph 7, the "authorization to fish" issued to a fishing vessel should contain conditions to be met by the owners, managers and/or charterers with regard to:
- a) the allocation of a flag to a fishing vessel;
 - b) information on the vessel required for entry in the national record;
 - c) information on catch retained and on catch discarded; and, vessel position reporting.
23. All fishing vessels operating or intending to operate in waters of States other than those of the flag State or on the high seas, should carry a document that attests to its nationality.

⁴ *It should be noted that inland waters are generally excluded from the provisions of maritime safety programmes. Furthermore, small-scale fisheries, whether inland water or in the marine environment, would require special attention by States.*

24. Furthermore, flag States should ensure that their fisheries research vessels, which operate or intend to operate in waters of States other than those of the flag State or on the high seas, are also issued with a Certificate of Registry and that they carry authorization issued by the competent authority in connection with their activities. In this connection, such vessels should follow internationally agreed codes of practice⁵.
25. In general, fishing vessels should be subject to a process of immatriculation and a public record should be kept for fishing vessels in which the following information, as appropriate, should be recorded:
- a) name of vessel or number;
 - b) port of registry/home port;
 - c) ITU International Radio Call Sign⁶;
 - d) length overall, as used to measure length for the purpose of the International Regulations for Preventing Collisions at Sea, 1972;
 - e) registered length, as defined in the Torremolinos International Convention for the Safety of Fishing Vessels, 1977, as modified by the Torremolinos Protocol of 1993 relating thereto;
 - f) gross registered tonnage as defined in the International Convention on Tonnage Measurement of Ships, 1969;
 - g) material of build;
 - h) vessel type/fishing method(s);
 - i) hold capacities in cubic meters; number of crew;
 - j) horse power of main engine(s) in kW;
 - k) date of build; Lloyd's Register number (where applicable);
 - l) INMARSAT number (where applicable);
 - m) name(s) and address of owner(s) and/or manager(s); and,
 - n) details of mortgages, maritime liens and other encumbrances.
26. The flag State should ensure that vessels to which it has allocated its flag carry on board the original of the Certificate of Registry or document in connection with the allocation of a flag. The vessels should also carry the authorization to fish issued by the competent authority.
27. A flag State may issue a document in which it calls on all other States to recognize that the vessel is sailing under its protection. This facility is often used when a vessel is being delivered to the flag State from the place where it had been built or in the case of a vessel that has had its registry closed by another State on the sale of the vessel to an entity in a new flag State. On arrival in the new flag State, a regular Certificate of Register (or Provisional Certificate) would normally be issued.

⁵ *Standards for the conduct of fisheries research vessels operating within waters under the jurisdiction of a State other than that of the flag State will be produced as a supplement.*

⁶ *Details of the International Telecommunications Union system of call signs assigned by the Union and States are given in the Standard Specifications for the Marking of Fishing Vessels. Annex II refers.*

28. An application for closure of the register or entry in a national record of fishing vessels should be accompanied by supporting information as to:
- a) the reason for the application (decommissioning/scrapping/sale); and,
 - b) if applicable the name(s) and nationality or nationalities of the new owners.
29. The flag State should provide details of the closure and, where known, the name of the new flag State to the appropriate international organization and to States Parties to any international agreement for the conservation and management of living marine resources, to which the flag State is a party.
30. A flag State should not delete from its registry, a fishing vessel that is the subject of a joint venture agreement and should remain responsible for the vessel at all times. In this respect, it would be important to note that there may be a case for exceptions to this rule with respect to a vessel under a demise charter (through which a vessel is leased bare of officers and crew for a fixed period of time) since some States allow for the primary register to be suspended or cancelled.

3.2 Fishing Vessel Maintenance and Mandatory Survey

31. A flag State should ensure that fishing vessels entitled to fly its flag are maintained in accordance with its national rules as well as the provisions of relevant international conventions to which it is a party and that vessel's documents are in order at all times.
32. The competent authority should maintain, as appropriate, a vessel survey service. This may be supported through arrangements with other States or the major classification societies particularly where a vessel rarely calls at a port in its flag State.
33. A flag State should ensure, through regular inspection of vessels entitled to fly its flag that they do not use anti-fouling paints containing compounds that endanger the aquatic environment.

3.3 Position Reporting of a Fishing Vessel

34. All fishing vessels should keep appropriate fishing and navigational logs and regularly report the position of the vessel to the competent authority. The position of the vessel may be reported in a number of ways and the requirement would differ with regard to the size of the vessel, its area of operation, the type of safety network in force and weather patterns. The authorization to fish could include a requirement for the carriage of equipment for the transmission of the position of a vessel over a local radio network or satellite communications system.

3.4 Marking of Fishing Vessels and Fishing Gear

35. A flag State should also ensure that vessels entitled to fly its flag are marked in accordance with the Standard Specification and Guidelines approved by the FAO Committee on Fisheries (COFI) at its 18th Session, Rome, 10-14 April 1989, for adoption on a voluntary basis. Annex II refers.
36. National legislation should also contain a requirement for the marking of fishing gear and fishing implements in order to identify the owner of the gear. Such requirements should take into account uniform and internationally recognizable gear marking systems. Nets, lines and other gear anchored in the sea as well as fish aggregating devices and nets, lines or fish aggregating devices which drift in the sea should also carry marks to indicate their position and the extent of the gear. Further details are given in:
- a) Annex III “Standard Specifications for the Marking of Fishing Gear”; and,
 - b) Annex IV “Guidelines for the Application of a Standard System of Lights and shapes for the identification and Location of Fishing Gear”.

3.5 Safety of Fishing Vessels

37. States should adopt standards of safety for all types and sizes of fishing vessels.
38. In setting standards of safety for fishing vessels, States should take into account :
- a) the Torremolinos International Convention for the Safety of Fishing Vessels, 1977 and its Protocol of 1993 (not in force);
 - b) FAO/ILO/IMO Code of Safety for Fishermen and Fishing Vessels; and,
 - c) FAO/ILO/IMO Voluntary Guidelines for the Design, Construction and Equipment of Small Fishing Vessels.

3.6 Training and Certification

39. Further to the guidance given in paragraphs 11 to 16, flag States should ensure that only trained, experienced and, where appropriate, certificated persons are placed in charge of fishing vessels entitled to fly their flags. In this respect, they should take into account the provisions of the ILO/FAO/IMO Document for Guidance on Fishermen's Training and Certification as, or as may be amended. Since it is common practice for the training of officers and crews for fishing vessels to be conducted by a different authority to the one responsible for the examination of candidates for Certificates of Competency, States should ensure that the Code is brought to the notice of the authorities. Trainees should be well versed in the provisions of the Code in preparation for an examination for a Certificate of Competency.

40. A flag State should assure itself that:
- a) foreign nationals under consideration for service as masters or other officers on board fishing vessels entitled to fly its flag, have been adequately trained; and,
 - b) where, applicable, their Certificates of Competency meet the requirements of the flag State for its own nationals.
41. States, whose nationals are under consideration for employment on foreign flag vessels, should cooperate by providing details of such nationals on request from the flag State.
42. Owners, managers and charterers must ensure that a vessel's documents are in order for the intended voyage. In particular, they should ensure that a Certificate of Registry is valid since a lapsed certificate could render a vessel Stateless and such an omission could have serious consequences for a vessel operating in the waters of another State or on the high seas.

3.7 Access to Insurance

43. Flag States should facilitate access to insurance markets by owners, managers and/or charterers in order to procure coverage for vessels, crew members and liability towards third parties; actual requirements, which would vary from place to place, may include, *inter alia*:
- a) access to foreign exchange;
 - b) facilitation of marine mutual organizations;
 - c) other legal provisions (e.g. limitation of legal liability).
44. There should be a requirement for owners, managers and/or charterers of a fishing vessel to carry insurance coverage for the crew and risks to third parties as well as pollution of the aquatic environment from the operation of the vessel. If a vessel is the subject of a grant or loan application, there should also be a requirement to take insurance coverage against loss or damage to the vessel.

3.8 Repatriation of Crew

45. Flag States should ensure that crew members are entitled to repatriation in accordance with the principles laid down in the "Repatriation of Seafarers Convention (Revised), 1987, (No. 166). The Convention expressly provides, in Article 1 (2), for the application of its contents to fishing vessels following consultations between the competent authority and the social partners.

4. GUIDELINES FOR PORT STATES (Ref. Section 8.3 of the Code)

4.1 Assistance to a Foreign Flag State

46. Port States should establish procedures in their national legislation, in accordance with international law, including applicable international agreements or arrangements, for it to achieve and to assist other States in achieving the objectives of the Code. Details of these procedures and measures to be taken to enforce them, should be made available by the port State to all other States.
47. A port State should not discriminate in form or in fact against vessels of any other State.

4.2 Inspection by a Port State

48. A port State should inspect such documentation required to be presented to the competent authority on entering a port with regard to the fishing vessel⁷, its crew and its cargo. The examination of the fishing vessel and its documents should include, *inter alia*:
- a) a certificate in connection with the registry of the vessel or other document associated with the allocation of the flag it wears;
 - b) the safety certificate of the vessel;
 - c) the authorization to fish;
 - d) where applicable, its authorization to fish on the high seas;
 - e) the examination of the fishing gear and catch to determine whether or not these comply with:
 - i) national regulations for vessels operating within the EEZ of the port State;
 - ii) international agreements for the conservation and management of living marine resources and protection of the environment.

4.3 Detention

49. A port State may detain a fishing vessel if it has sufficient reason to believe that the vessel does not comply with the above requirements, unless, in the case of subparagraph 47 b), that:
- a) the deficiencies cannot be rectified in the port;
 - b) in the case of navigation equipment and the vessel's propulsion machinery, the emergency or stand-by equipment has been adequately demonstrated;

⁷ Further guidance is set out in IMO Conventions:

- *Convention on Facilitation of International Marine Traffic (FAL)*;
- *Convention on the Safety of Life at Sea (SOLAS)*;
- *Torremolinos International Convention for the Safety of Fishing Vessels, 1977, as modified by the Torremolinos Protocol of 1993 relating thereto.*

c) in the case of vessels in class, the classification society surveyor concerned is in agreement.

50. The port State should immediately inform the flag State of any deficiencies found and of any action taken. The port State should also be prepared to take any, or further action as the case may be, at the request of the flag State.
51. A fishing vessel may not be unreasonably detained⁸. If, in the opinion of the owner, a vessel is unreasonably detained, compensation may be claimed from the port State. However, the owner of a fishing vessel should not have the right to claim for lost fishing time or for alleged loss of income with respect to sale of the catch.. For this purpose, the Master of a fishing vessel is considered to be an agent of the owner.
52. Pursuant to paragraph 49 above, the port State should also inform the relevant international organization as may be required under any international convention, legal instrument or regional arrangement to which the port State is a Party.

4.4 Validity of Certificates and Authorization to Fish

53. In the event that a certificate or document evidencing the allocation of a flag or authorization to fish may expire after the vessel leaves port and while the fishing vessel is at sea, the flag State should be immediately informed. This information should also be made available to the competent fisheries management organization for the area in which the vessel may operate with respect to the "Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas".

4.5 Stateless Fishing Vessel

54. If a port State has reasonable cause to believe that a vessel is under the flag of two States and using them according to convenience, that vessel may be treated as if were to a vessel without nationality and detained. The vessel may be disposed of if so required to offset the costs incurred by the port State.

4.6 Training

55. States should cooperate with each other to adopt the common standards of training for port State inspectors and surveyors⁹.

⁸ *Provisions are made for detention under international convention; see also the Protocol to Torremolinos.*

⁹ *For large cargo ships, a number of regional memoranda of understanding have been developed; these exclude fishing vessels, but not other vessels covered by the Code. Complaints of discrimination by port State surveyors has led IMO to elaborate common standards of behaviour.*

5. GUIDELINES FOR FISHERIES PROTECTION

5.1 Fisheries Protection Vessels

56. As set out in paragraph 10, States should establish a system of monitoring, control, surveillance and law enforcement which may include the use of vehicles, vessels, aircraft and other means.
57. Vessels assigned by States for the purpose of paragraph 55 should have the right to stop and board any vessel suspected of fishing illegally or for the purpose of determining the right of the vessel to the flag it displays or if not clearly marked, to determine its name, port of registry and nationality. Such interventions should also be valid for vessels flying the flag of a State other than that of the fishery protection vessel.
58. A fishery protection vessel should be clearly marked and identifiable as being on government service to avoid uncertainty on behalf of the crew of a fishing vessel as to its purpose. In particular it should:
- a) be marked in accordance with the Standard Specifications for the Marking and Identification of Fishing Vessels;
 - b) be painted with the words "Fisheries Protection Vessel" on both sides above the water line; the style and size of the letters to follow the Standard Specifications for the Marking of Fishing Vessels; and,
 - c) two bands of paint against a contrasting background each band 0.8 m wide and 0.8 m apart sloping forward at 60 degrees to the base line of the vessel should be applied forward of amidships from the water line to the line of the deck or gunwale as the case may be and in a manner so as not to obliterate the name of the vessel or the marks to be displayed under a) and b) above.
59. The fisheries protection vessel should carry documentation giving proof of the authority vested in its Master and the "authorized officer" for the purpose of fisheries protection in an EEZ or in areas of the high seas covered by relevant international convention or agreement to which the flag State is a party.

5.2 Fisheries Protection Officers

60. Fishers should be made fully aware of the authority vested in fisheries protection officers through programmes for their certification and training as well as public awareness programmes.
61. The general powers of authorized officers for the purpose of fisheries protection with respect to any fishing vessel of the enacting State or as provided for under any international agreement for conservation and management measures regulating high seas fishing to which the enacting State is a party, should include, *inter alia*, the power to:
- a) cause the master (of a fishing vessel) to stop the vessel;

- b) require the master to stop fishing and take the fishing gear of the vessel back on board;
 - c) require the master to facilitate the boarding of the fishing vessel by all appropriate means;
 - d) go on board the fishing vessel together with such other persons as may be required to assist in exercising the powers of the authorized officer;
 - e) require the master, the crew or any of them to produce any certificate of registry, record of fish caught and any other document relating to the fishing vessel and to the crew or any member thereof or to any person on board the fishing vessel;
 - f) examine and take copies of any document mentioned above; muster the crew;
 - g) require the master to appear and give any explanation concerning the vessel and the crew or any person on board the fishing vessel and any document mentioned in paragraph e) above;
 - h) make any search, examination or enquiry which may be considered necessary to find out whether any provisions of national legislation has been contravened or, as the case may be, of any provision of an international agreement for a high seas area;
 - i) require the master to take the fishing vessel to a port or harbour in the flag State of the protection vessel for the purpose of carrying out of any search, examination or enquiry or, to a port or harbour as provided for under any international agreement for a high seas area as the case may be;
 - j) in the case of any person believed to have committed an offence against national regulations or regulations under an international agreement to which the enacting State is a party, the authorized officer may without summons, warrant or other process, take the suspected offender and take or require the master to take the vessel in respect of which it appeared that there had been an offence together with the crew thereof to a port or harbour the enacting State and bring them before a competent court and detain the master and crew and the vessel until the alleged offence has been adjudicated upon;
 - k) take, having regard for the safety of the fishing vessel, steps to immobilize any fishing vessel seized, taken or detained for the purpose of preventing the vessel being taken by any person prior to the release of the fishing vessel;
 - l) seize any fishing gear, instruments or appliances believed to have been used in the commission of such offence;
 - m) seize any fish believed to have been taken or fish products produced in the commission of such offence; and,
 - n) seize or take copies of any documents believed to be relevant to such offence.
62. In exercising the powers referred to in paragraph 60 above, the authorized officer may use such force as may be reasonably necessary.
63. In the event of resistance by the fishing vessel to comply with a request to be escorted to the nearest port, the position of the vessel should be monitored and reported by the fishery protection vessel. On arrival of the fishing vessel at a port, the Master of the fishery protection vessel, with the support of the authorized officer on board, should lodge a "sea protest" with the competent authority. Should the fishing vessel continue to fish, the fishery protection vessel may take appropriate

action to sever the fishing gear and report the action taken to the competent authority.

5.3 Stateless Fishing Vessel

64. A fishing vessel which is Stateless by virtue of Article 92, paragraph 2 of the United Nations Convention on the Law of the Sea, may be escorted to the nearest port. Such action should not be deemed to call into question the nationality of the crew or declare any member of the crew Stateless. The embassy/consulate of each crew member and the relevant international organization should be duly informed by the port State.
65. A fishing vessel should not be considered to be Stateless if the Certificate of Registry or documentation concerning the allocation of flag expired while the vessel is at sea, provided that the intention of the flag State, to revalidate the said certificate or document is obtained by the protection vessel by facsimile. Voice communication by radio or telephone link should not be acceptable for this purpose.

5.4 No Force Strategies

66. States should also employ "no force" strategies and these may include, *inter-alia*:
- a) the use of observers (without enforcement powers) on board vessels for the purpose of collecting data and reporting on the conduct of the Master and the crew;
 - b) the establishment of sub-regional and regional records of fishing vessels and authorizations to fish;
 - c) remote sensing and communication techniques¹⁰;
 - d) catch and gear monitoring at the dockside as well as catch processing plant inspections; and,
 - e) inspection and reporting by Port States.
67. Vessels and aircraft used for the purposes of monitoring, control, surveillance and law enforcement, should be equipped with appropriate communication systems and means for the identification of fishing vessels and the verification of their authorizations to fish without the need for boarding.
68. States should also ensure that fisheries protection vessels and aircraft form an integral part of Search and Rescue (SAR) networks. A protection vessel, in addition to its traditional role as a "shepherd" to the fishing fleet, may also be used, in the

¹⁰ With regard to remote sensing and satellite communication systems, States should agree on technical specifications and minimum performance standards that would provide the basis for agreement on the admission in court of evidence so generated at the time of the alleged contravention, for example:

- identification of the vessel;
- position of a vessel and date and time;
- operational mode.

course of its normal duties or on special assignment, to collect and relay information related to weather.

6. GUIDELINES FOR FISHING ACTIVITIES
(Ref. Sections 8.4 and 8.5 of the Code)

6.1 Fishing Gear

69. The competent authority should adopt appropriate management policies with regard to allowable fishing gear, fishing practices and operations ¹¹.
70. Those engaged in fishing activities should respect regulations with regard to fishing gear and fishing methods and should not use gear or methods nor should they fish in areas or times of the year that would jeopardize a fishery or endanger fish stocks or the environment.
71. No new fishing practices or fishing methods should be introduced unless prior assessment has demonstrated that it would not result in significant waste of target or non-target species. In like manner, no new fishing practices or fishing gear should be introduced by the industry on a commercial basis unless prior assessment has shown that it would not be to the detriment of artisanal or small scale fisherfolk and their communities.
72. In general, the competent authority should allocate fishing rights to artisanal and small scale fishers. Control should also be exercised to reduce conflict between passive and active gears and between the small scale fisheries sector and those engaged in industrial fisheries.
73. The competent authority should also give due consideration to the degree of selectivity of fishing practices and fishing gear with respect to target and non-target species when elaborating regulations. In this respect, the competent authority should consult those engaged in fishing in order that due account can be taken of the range of selective fishing tactics and gear commonly used by the industry.
74. Competent authorities, research institutions and the fishing industry should collaborate in the development of more selective fishing gears.
75. There should also be close collaboration between States to develop standard methodologies into fishing gear selectivity as well as selective fishing methods and tactics. States and the research institutions involved should ensure wide dissemination of the information generated in the process.

¹¹ *Management practices and operational guidance for those engaged in fisheries with regard to "Harvesting Practices" will be produced as a supplement to these guidelines.*

6.2 Conduct of Fishing Vessels

76. No fishing vessel should anchor or remain on a fishing ground where fishing is in progress if it would interfere with such fishing unless required for the purpose of its own fishing operations or as a consequence of an accident or other circumstances beyond its control.
77. Subject to compliance with the International Regulations for the Prevention of Collision at Sea all vessels should conduct their operations so as not to interfere with the operations of fishing vessels, or fishing gear already set.
78. Except in cases of force majeure, no fishing vessel should dump in the sea or inland waters, any substance which may interfere with fishing or obstruct or cause damage to fish, fishing gear, other fishing vessels or the aquatic environment.
79. When a fishing vessel fouls or otherwise interferes with gear not belonging to it, it should take all necessary measures to reduce to a minimum the damage which may result to such gear. The fishing vessel to which the gear belongs should, at the same time, avoid taking any action which may tend to aggravate the damage.
80. Those in charge of a fishing vessel or any other fishing activity, should endeavour to retrieve lost fishing gear. In the event of unsuccessful attempts to retrieve the gear, the extent, type, position and gear mark should be reported to the competent authority. Any other lost gear encountered, should, to the extent possible, be recovered and taken to port or if not recovered, details of the gear and its position should be reported to the competent authority.
81. Fishers should be made aware of and respect the regulations governing "ship traffic separation schemes", ships routing and regulations for the avoidance of sensitive areas.
82. In addition to complying with the rules relating to lights and shapes as prescribed in the International Regulations for Preventing Collisions at Sea, fishing gear should be marked with respect to its position in the sea¹².

6.3 Records of Fishing Vessel Activities

83. Fishing vessel owners, managers and fishers should ensure that the regulations set by the competent authority with respect to fishing gear, fishing methods and reporting on catch taken are followed. Records required by the competent authority should be maintained by those in charge of a fishing vessel in the form of log books and should include, as appropriate:

¹² *IMO reviewed the report of the Expert Consultation on the Marking of Fishing Gear, Victoria, British Columbia, Canada, 14-19 July 1991 and accepted proposals made by FAO regarding changes to the Collision Regulations; IMO did not consider it necessary to include the proposals for the marking of fishing gear in the Regulations. Annex IV refers.*

Deck Log

- a) date, time and port of departure;
- b) officer of the watch;
- c) noon position by long/lat or Decca/Loran readings;
- d) weather and sea state;
- e) auto-pilot on/off time and date;
- f) time and date of changing from steaming to fishing mode and vice versa;
- g) time, date and position of transshipment;
- h) date, time and port of arrival; and.
- i) interventions by authorized persons, at sea or in port to be recorded in the remarks column;

Fishing Log

- a) time, date and position of setting fishing gear;
- b) type and amount of fishing gear deployed;
- c) when and where (time, date and position) gear retrieved;
- d) composition and weight of catch taken;
- e) catch processed on board and storage details;
- f) catch landed by species and weight; and,
- g) observers remarks.

Machinery Log

- a) date, time and port of departure;
- b) fuel on sailing;
- c) weather and sea state;
- d) officer of the watch;
- e) noon readings;
- f) hours run or total revolutions per watch/day by main engine(s);
- g) hours run by auxiliary engines per watch/day;
- h) hours run by refrigeration machinery per watch/day;
- i) fish room temperatures;
- j) time oily-water separator in use;
- k) average main engine exhaust and water temperatures;
- l) engine RPM in free running and fishing mode;
- m) times and dates deck machinery in use; and,
- n) details of ballasting and deballasting.

84. To enable those on board to comply with regulations concerning the maintenance of log books, owners should ensure that fishing vessels are equipped with appropriate navigation equipment and instrumentation.
85. In addition to log books kept in a hand written format, fishing vessels should be fitted with electronic data storage devices and to the extent possible, remote sensing devices that would record the position and performance of the fishing vessel for the purpose of fisheries management and safety at sea. To the extent practical, such

systems should be fully automatic and only require that the catch data be manually entered. The technology exists for such applications and the requirements for data to be transmitted could include, but need not be limited to:

- a) main engine performance ;
- b) temperature sensors (tunnel freezers, fishrooms, etc.);
- c) vessel position and course;
- d) echo sounder/sonar data; and,
- e) catch data.

6.4 Care of the Catch

- 86. The officers and crew of a fishing vessel should ensure that the catch is handled in such a manner that quality is maintained until the catch is discharged.
- 87. Owners and/or managers should ensure that the fishrooms on board fishing vessels are fitted out in the appropriate manner for the type of fishing activity anticipated. In particular, proper drainage should be achieved under all conditions. Where the washing down of the fishrooms is carried out using pumps (irrespective of the power source) the pump used for the hosing down of the fishroom shall not be the same as the pump for draining the bilge.
- 88. To the extent possible, owners and managers should ensure that the paint systems supplied for painting the fishroom or fixed fish containers are of a type that are antifungal and non-toxic.
- 89. Fishrooms should be ventilated periodically, especially when the vessel is used for the carriage of fish on ice.

6.5 Insurance Coverage

- 90. Owners and/or managers should carry sufficient insurance coverage to protect their interests in a fishing vessel, third party liabilities and for the protection of the crew. It should be noted, however, that there are no international requirements for a vessel to be insured. Furthermore, there are no mandatory levels of coverage since this is generally seen as a purely commercial risk and a matter for owners to determine in consultation with brokers or a marine mutual. Nevertheless, it is advisable that such policies should cover, *inter alia*:
 - a) hull and machinery;
 - b) protection and indemnity;
 - c) war and strikes; and,
 - d) pollution.
- 91. The Protection and Indemnity policies should give adequate coverage for the crew of a fishing vessel in the event of accident and/or death of a crew member.

92. Insurance coverage for fishing vessels under charter should include "loss of hire" in order to protect the crew for their wages.
93. Where appropriate, the competent authority should assist those engaged in fishing to form mutual insurance associations.
94. The competent authority should make it a legal requirement for owners or managers to cover risks to third parties and crew.
95. The actual vessel, the "Hull and Machinery" cover, being related to the value of the vessel and or replacement value, is usually the subject of negotiation for commercial reasons as stated above and may also be subject to survey on behalf of the underwriters prior to setting conditions.
96. There is also a case for the competent authority to require vessels on charter to provide cover in respect of crews' wages in cases of loss of hire or commercial set backs. This would be of particular relevance where nationals of a coastal State may be crew of a foreign flag vessel or in the case of a bare boat charter.

6.6 Transshipment

97. The transshipment of fish or fishing products at sea should be regulated to ensure compliance with all conservation and fisheries management measures.
98. With regard to the transshipment of catch between fishing vessels authorized to operate in an EEZ the transshipment should take place within the EEZ and:
 - a) the entry in the log books of each vessel should record the transfer giving date, time, position, quantity and type of fish; and,
 - b) the vessel receiving the transshipment should not proceed to a port outside the coastal State, for the purpose of discharging the catch, unless specifically authorized to do so by the coastal State.
99. The competent authority should set rules to cater for regular and authorized methods of fishing that necessitates the transfer of catch directly from a net deployed by a vessel fishing to other vessels and for vessels engaged in pair trawling and/or motherships.
100. The transfer of catch from a fishing vessel, a support vessel or reefer or other vessel engaged in the carriage of cargo, should also be recorded in the log books and a separate receipt or sales record should be furnished by the reefer or other vessel and should carry the seal of that vessel.
101. For all transshipment, whether made on the high seas, at sea within EEZ's or in a port, the bills of lading should show the name of the catching vessel and origin of the catch. In addition, the full documentation to be made available for scrutiny by a port State should give the:

- a) name, port of registry, the nationality and international radio call sign of the vessel carrying the catch;
- b) name, port of registry, the nationality and international radio call sign of the vessel that made the catch;
- c) details of the authorization to fish;
- d) amount of the catch by weight and by species; and,
- e) fishing area(s) in which the catch and or part(s) of the catch was/were taken.

7. GUIDELINES FOR ENERGY OPTIMIZATION AND PROTECTION OF THE OZONE LAYER (Ref. Sections 8.6 and 8.7 of the Code)

7.1 Energy Optimization and Saving

- 102. States, in cooperation with relevant international organizations and the fishing industry should develop and adopt standards for the optimization of the use of energy in fisheries. Such standards and associated guidelines for their application, should cover both harvesting and post harvest sectors for full benefits to be derived by the sector as a whole.
- 103. Such standards and associated guidelines should take into account the provisions of the 1987 Montreal Protocol to the Vienna Convention on Substances that Deplete the Ozone Layer, since these have a direct influence on energy optimization programmes. Technical standards, specifications and recommendations will be prepared as a supplement to these guidelines.
- 104. Owners and/or managers should ensure that their vessels are designed or refitted with equipment to enhance energy optimization and reduce the emissions of dangerous substances to the atmosphere.
- 105. Owners, managers, charterers and officers of fishing vessels should adopt operational strategies that would contribute to energy saving. States could make a contribution to these strategies by improving Geographic Information Systems (GIS) and through the provision of fisheries-related information regarding stocks, their distribution, and migrations as well as sea bed characteristics. Electronic chart systems should also be upgraded to incorporate fisheries-related information. Furthermore, States, research institutions and commercial companies, should be encouraged to cooperate in the provision of satellite-generated information for use in real time as well as for forecasting fishing conditions.
- 106. Officers and crews of fishing vessels should be trained in energy optimization and energy saving-techniques. States and, where appropriate, non-governmental training institutions, should ensure that existing training courses are amended accordingly.
- 107. Officers and crews of fishing vessels should be conversant with the proper running and maintenance of marine machinery in order to ensure that harmful substances in exhaust gas emissions (NO_x, SO_x) do not exceed the levels set by the competent authority.

7.2 CFC and Halon

108. States should make provisions in national legislation for the phasing out of the use of Chlorofluorocarbon (CFC) in refrigeration systems as well as Halon in fire-extinguishing systems. They should ensure that the shipbuilding industry and those engaged in the fishing industry are so informed of the time frame.
109. States, owners, managers and those involved in the fishing industry should follow international guidelines for the safe disposal of CFC's.

8. GUIDELINES FOR THE DESIGN, CONSTRUCTION AND MODIFICATION OF HARBOURS AND LANDING PLACES FOR FISHING VESSELS (Ref. Section 8.9 of the Code)

110. States should establish an institutional framework for the selection or improvement of sites for harbours for fishing vessels and their operation which allows for consultation among the authorities responsible for coastal area management¹³.
111. States should cooperate with each other where such coastal area management arrangements are of a regional or sub-regional nature.
112. Those responsible for fisheries development should ensure that such bodies provide for adequate research and monitoring of the environment. In particular, they should ensure that geographical information systems (GIS) include, inter alia:
- a) hydrographic and weather data; charts of the sea bed (lake bottom) showing the geology, spawning beds, fishing areas/species distribution (fisheries atlas), oil/gas installations, pipelines and telephone lines as well as areas designated for sea bed mining¹⁴;
 - b) position of land based facilities discharging waste products into the aquatic environment and the extent and type of discharge; and,
 - c) planned development projects and their implications.
113. States should require, as appropriate, an environmental audit in support of applications for new harbours or landing places or improvements to existing facilities.

¹³ *The Integration of Fisheries into Coastal Area Management is the subject of Article 10 of the Code and is supported by separate guidelines.*

¹⁴ *It would be normal to establish a distance from the coast or a depth contour as well as a grid size within which the charts should contain detailed information.*

114. In general, competent authorities should adopt acceptable standards¹⁵ and follow guidelines for the design, construction, maintenance and management of harbours and landing places for fishing vessels, to ensure, inter alia:
- a) safe havens for fishing vessels;
 - b) that fresh water supplies are available;
 - c) the provision of adequate sanitation arrangements;
 - d) that waste disposal systems, (including oil and oily water) are provided;
 - e) that there would be no pollution from external sources (non-fisheries activities);
 - f) that there would not be any pollution arising from fisheries activities;
 - g) the provision of adequate servicing facilities for vessels, vendors and buyers;
 - h) that maintenance programmes include the monitoring of the effects of operations conducted at the facility on the environment;
 - i) compliance with relevant conventions concerning pollution of the aquatic environment. In particular, Annex V of MARPOL 1972/8, Regulation No.3 (Regulations for the prevention of pollution by garbage);
 - j) integration with other users as in the case of a non-exclusive facility for the fishing industry; and,
 - k) that arrangements are made to combat the effects of erosion and siltation.
115. Users awareness programmes should be implemented to assist them to abide by the by-laws of the harbours and landing places. Furthermore, users should be encouraged to take an active part in the management structure established for ports, harbours and landing places.

¹⁵

Procedures for the development and management of harbours and landing places for fishing vessels, as well as the improvement of existing facilities, will be prepared as a supplement to these guidelines.

9. GUIDELINES FOR THE REMOVAL OF REDUNDANT OFFSHORE STRUCTURES, THE CREATION OF ARTIFICIAL REEFS AND THE DEPLOYMENT OF FISH AGGREGATING DEVICES

(Ref. Sections 8.10 and 8.11 of the Code)

9.1 Policy

116. States should develop policies and management systems for increasing stock abundance and enhancing fishing opportunities through the use of artificial structures placed on the sea bed, in the water column or at the surface.
117. The competent authorities should be aware of the need, by international convention, for the removal of redundant offshore structures¹⁶. Furthermore, States should ensure that the competent authority for fisheries is consulted prior to decisions being made by those responsible for the total, or partial removal and disposal of such structures.

9.2 Artificial Reefs

118. The competent authorities should also take into consideration the provisions of relevant International Conventions concerning dumping, prevention of pollution (of the marine environment) and safety of navigation with regard to the creation of artificial reefs and the choice of materials for their construction.
119. Furthermore, the creation of artificial reefs should be seen within the context of the integration of fisheries into coastal area management in order to maximize benefits and reduce adverse interactions with other users of the zone.
120. The systems established for the management of artificial reef structures should include a requirement for the approval of construction and deployment of such reefs and structures and should take into account the interest of fishers, including artisanal and subsistence fishers.
121. The competent authority should also ensure that the authorities responsible for maintaining cartographic records and charts for the purpose of navigation, as well as relevant environmental authorities, are informed prior to the placement or removal of artificial reefs or fish aggregation devices.

¹⁶ On 19 October 1989, the IMO adopted *Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone; these will be reproduced in the supplement series.*

9.3 Fish Aggregating Devices

122. Fish aggregating technology should be further developed to improve the performance of anchored and drifting devices.
123. The management systems concerning Fish Aggregating Devices (FADs) should set out the responsibility of the competent authority and the users for minimum design standards, operation and maintenance of FADs.
124. The competent authority should also establish a system of approval for the deployment of FADS and maintain a record of the owners. The record should contain, as a minimum requirement:
 - a) the mark assigned by the competent authority for the identification of ownership;
 - b) name and address of the owner(s);
 - c) type of FAD; and,
 - d) location of allocated geographical position.
125. The competent authority should ensure that the authorization to fish at FADs includes details of the fishing methods to be used as well as a requirement for reporting catches.
126. FADs whether drifting or anchored, should carry means to identify their position by day and by night.
127. The competent authority should also establish a system for the reporting of lost FADs and the retrieval of those considered to be a danger to navigation.