



## II. International conventions and guidelines on safety at sea

Improved safety at sea has for decades been of major concern to various institutions, national authorities, non-governmental organizations and individuals, who recognize that a functional legal framework is the prerequisite for concerted actions for improved safety. The model for such legislation has already been provided by various international organizations.

### IMO - ILO - FAO

The International Maritime Organization (IMO), the International Labour Organization (ILO) and the Food and Agriculture Organization (FAO) are the three specialized agencies of the United Nations system that play a role in fishermen's safety at sea. IMO is the agency responsible for improving maritime safety and preventing pollution from ships; the adoption of maritime legislation is still IMO's best-known responsibility. ILO formulates international labour standards in the form of Conventions and Recommendations, setting minimum standards of basic labour rights. It also promotes the development of independent employers' and workers' organizations and provides training and advisory services to those organizations. ILO has adopted seven instruments specifically applying to fishermen: five conventions and two recommendations. These instruments cover the issues of minimum age, medical examination, articles of agreement, competency certificates, accommodation, hours of work and vocational training.

By virtue of their working methods, the results of IMO and ILO tend to have little impact on the safety of artisanal and small-scale fishermen. Most of the recommendations and conventions are aimed at large vessels, primarily the merchant fleet on international voyages. Some conventions explicitly exempt fishing vessels, and most do not apply to vessels under 24m thus leaving out the majority of fishing vessels and transport boats in the developing countries. The average size of decked vessels in 1995 was about 20GT. Those larger than 100GT (roughly equivalent to longer than 24m) amounted to about 37,000 or just about 1% of the entire world fishing fleet of both decked and undecked vessels.<sup>16</sup> (see also fig 1. Box 2)

FAO has the mandate to raise levels of nutrition by improving productivity and distribution of food, and to raise the standards of living and better the conditions of rural populations. On average, FAO has some 1,800 field projects operating at any one time, and since its inception, has implemented hundreds of fisheries projects in the field directly related to the establishment of fisheries training institutions, improving the quality of design, construction and equipment of fishing vessels, and above all, working directly with fishing communities.

In 1995, FAO completed the Code of Conduct for Responsible Fisheries, which encompasses the main elements of the various international conventions and legislation concerning fisheries and related environmental issues. The Code provides a comprehensive set of voluntary guidelines for responsible fisheries. FAO monitors the implementation of the Code among its member states biennially.

### SOLAS

The first international convention concerning safety at sea was SOLAS (Safety of Life at Sea), prompted by the Titanic disaster in 1911. The convention was first adopted in 1914, with amendments adopted in 1929 and 1948. When IMO was founded in 1958, its first major task

was the amendment of SOLAS in 1960, and the Organization has subsequently ensured that its revision is an ongoing process.

SOLAS specifies minimum standards for the construction, equipment and operation of ships compatible with their safety. It is generally regarded as the most important of all international treaties concerning the safety of merchant vessels and is in fact embraced by the United Nations 1982 Law of the Sea Convention as a generally accepted international regulation. Apart from Chapter V, SOLAS does not apply to fishing vessels, wooden ships of primitive build and ships not propelled by mechanical means, thus leaving out most of the fleet in the developing countries; Chapter V deals with safety of navigation and identifies certain navigation safety services that should be provided by Contracting Governments and sets forth provisions of an operational nature applicable in general to all ships on all voyages. This is in contrast to the Convention as a whole, which only applies to certain classes of ship engaged on international voyages.

The international conference that adopted SOLAS 60, however, approved three resolutions related to fishing vessels. The first referred to the application of the SOLAS 60 stipulations to such vessels, and particularly to reasonable measures regarding rescue equipment on board. The second called upon governments to inform IMO about the degree to which they apply SOLAS to fishing vessels. The third concerned fishing vessel stability and resulted in extensive work carried out by subcommittees, with active participation of experts from FAO. In 1985, the IMO Maritime Safety Committee prepared recommendations for weather criteria with respect to intact stability.<sup>17</sup> This resolution is applicable to cargo and passenger ships of 24m in length and more, and to fishing vessels 45m in length or more. Yet again, these criteria do not apply to the majority of passenger and fishing vessels used in the developing countries.

Recognizing that a number of fishing boat accidents are caused by submarines, a resolution was adopted in 1987, recommending operational practices for submarines, in order to reduce this danger.<sup>18</sup>

## UN LAW OF THE SEA CONVENTION<sup>19</sup>

The United Nations Conference on the Law of the Sea (UNCLOS III)<sup>20</sup> was completed in 1982, although its Convention did not enter formally into force until 1994 when it had been ratified by the required number of states.<sup>21</sup> The UN Convention on the Law of the Sea, 1982, (hereafter referred to as the 1982 UN Convention) had by May 2000 been ratified by 133 states. It is globally recognized as the regime dealing with all matters relating to the law of the sea and gives nations rights as well as responsibilities to utilize their living marine resources in a rational and sustainable way. Regarding safety, the 1982 UN Convention rules that every State shall effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag. Further, the flag nation shall take such measures for ships flying its flag as are necessary to ensure safety at sea with regard to, *inter alia*: (a) the construction, equipment and seaworthiness of ships; (b) the manning of ships, labour conditions and the training of crews, taking into account the applicable international instruments; (c) the use of signals, the maintenance of communications and the prevention of collisions. In taking such measures, each State is required to conform to generally accepted international regulations, procedures and practices and to take any steps necessary to secure their observance (Article 94(5)).<sup>22</sup>

## TORREMOLINOS CONVENTION AND THE TORREMOLINOS PROTOCOL

The Torremolinos International Convention for the Safety of Fishing Vessels, 1977, was the first ever international convention on the safety of fishing vessels. It was intended as a more

formal document than the Code and Voluntary Guidelines (see below), formulated more along the lines of the International Convention for Safety of Life at Sea, 1974 (SOLAS), and was adopted at a conference held in Torremolinos, Spain. The Convention contains safety requirements for the construction and equipment of new, decked, seagoing fishing vessels of 24m in length and over, including those vessels also processing their catch. Existing vessels were covered only in respect of radio requirements.

One of the most important features of the Convention was that it contained stability requirements for the first time in an international convention. Other chapters dealt with such matters as construction, watertight integrity and equipment; machinery and electrical installations and unattended machinery spaces; fire protection, detection, extinction, and fire fighting; protection of the crew; lifesaving appliances; emergency procedures, musters and drills; radiotelegraphy and radiotelephony; and shipborne navigational equipment.

It was agreed in 1977 by representatives of 45 countries, but subsequently the Convention has not received sufficient ratifications to enter into force, as many states claim it to be either too stringent or too lenient for their fishing fleets. It was therefore decided to prepare a Protocol to the Convention. The purpose of the Protocol is to overcome the constraints of the provisions in the parent Convention that have caused difficulties for States, and thereby enable the Protocol to be brought into force as soon as possible.<sup>23</sup> In several chapters, this was achieved by raising the vessel lower size limit from 24m to 45m. The Protocol also calls for the development of Regional Guidelines for those vessels between 24m and 45m, taking into account the mode of operation, sheltered nature and climatic conditions of that region.

## **CODE OF SAFETY FOR FISHERMEN AND FISHING VESSELS**

The three organizations of the United Nations, ILO, IMO and FAO have jointly prepared a Code of safety for fishermen and fishing vessels. Part A, "Safety and health practices for skippers and crews" was adopted in 1968. It is an educational tool dealing with the fundamentals of safety and health. Part B, "Safety and health requirements for the construction and equipment of fishing vessels," adopted in 1974, is intended to serve as a guide to those concerned with framing national laws and regulations. Its application is limited to fishing vessels of 24m in length and over, excluding recreational fishing vessels and processing vessels. The Code is currently being revised.

## **FAO-ILO-IMO VOLUNTARY GUIDELINES FOR THE DESIGN, CONSTRUCTION AND EQUIPMENT OF SMALL FISHING VESSELS**

Since neither the 1977 Torremolinos Convention nor the Part B of the Code for Safety is applicable to fishing vessels under 24m in length, and recognizing that the great majority of fishing vessels are smaller than this, voluntary guidelines were prepared in 1980 by the FAO, IMO and ILO covering the design, construction and equipment of fishing boats between 12m and 24m in length, based on the points outlined in the safety codes. As with the Code for Safety, these guidelines are not intended as a substitute for national laws, but to serve as a guide to those concerned with framing national laws and regulations. Two publications (FAO/ILO/IMO Code of Safety for Fishermen and Fishing Vessels and FAO/ILO/IMO Voluntary Guidelines for the Design, Construction and Equipment of Small Fishing Vessels) are being revised by the IMO Subcommittee on Stability, Load Lines and Fishing Vessels through a correspondence group led by Iceland. FAO has actively participated in the process.

## **STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR FISHING VESSEL PERSONNEL (STCW-F CONVENTION)**

The STCW-F Convention, which was adopted by IMO in 1995, contains requirements concerning skippers and watchkeepers on vessels of 24m in length and over, chief engineers and engineering officers on vessels of 750 kW propulsion power or more, and personnel in charge of radio communications. Chapter III of the Annex to the Convention includes requirements for basic safety training for all fishing vessel personnel. As of May 2000, the STCW-F Convention had been ratified by two countries.<sup>24</sup>

## DOCUMENT FOR GUIDANCE ON THE TRAINING AND CERTIFICATION OF FISHING VESSEL PERSONNEL (FAO/ILO/IMO)

This Document for Guidance takes account of the Conventions and recommendations adopted by ILO and IMO and of the wide practical experience of FAO in the field of training for fishing vessel personnel. It is intended to provide guidance when national training schemes and courses are instituted, amended or developed for the vocational training of any category of fishing vessel personnel. It is stressed that the additional guidance on training is complementary to, and not intended to supersede, the knowledge requirements specified in these ILO and IMO Conventions and recommendations. The Document applies to the training and certification of both small-scale and industrial maritime fisheries. However, in the case of fishing vessels of less than 24m in length, or powered by main propulsion machinery of less than 750 kW propulsion power, certification is not prescribed, but may be introduced at the discretion of the competent administration. It is a revision of an earlier publication to take into account the STCW-F (1995), the FAO Code of Conduct for Responsible Fisheries, and recent developments in the fishing industry.

## THE CODE OF CONDUCT FOR RESPONSIBLE FISHERIES

The Code of Conduct for Responsible Fisheries was unanimously adopted by the FAO Conference in 1995. 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 Law of the Sea of 10 December 1982. The Code also contains provisions that may in the future be given, or have already been given binding effect by means of other obligatory legal instruments among the Parties, such as the Agreement to Promote Compliance with Conservation and Management measures by Fishing Vessels on the High Seas, 1993. It is a unique instrument in its holistic approach, based on and bringing together key elements from the then existing international conventions and guidelines concerning fisheries and related environmental issues.<sup>25</sup> It offers guidelines for responsible fisheries, establishing principles and standards applicable to the conservation, management and development of all fisheries. The Code recognizes the nutritional, economic, social, environmental and cultural importance of fisheries and the interests of all those concerned with the fishery sector. It also recognizes the importance of the safety issue, and contains several separate references to the subject, addressing working and living conditions, health and safety standards, education and training, safety of fishing vessels, search and rescue, and accident reporting.<sup>26</sup>

The fact that the Code is to a great extent non-mandatory has proven to be more of an asset than a weakness. This renders the Code attractive as a model on which to base the management of fisheries and its adoption does not carry the same formal consequences as the conventions it is based on. The Code functions well as a model which can be applied under various conditions without the constraint of having to comply with standards that are not appropriate for the nation in question.

Every other year, FAO monitors to what extent the member states comply with the Code of Conduct. A response rate of 60% (during the year 2000) of all FAO member states, including landlocked countries, must be regarded as quite encouraging. Several countries have adapted the Code to their fisheries and stage of development and it seems to serve well as a framework

within which to build different types of management systems.<sup>27</sup> It may be added that the Philippine Fisheries Code of 1998 closely follows the principles enshrined in the Code of Conduct. In addition to the Code itself, FAO has prepared a series of Technical Guidelines for Responsible Fisheries, consisting at present of nine separate publications.<sup>28</sup>

## IMO CODE FOR THE INVESTIGATION OF MARINE CASUALTIES AND INCIDENTS

This Code aims to create a marine casualty investigation process that establishes the circumstances relevant to a casualty, publicizes the causes of the casualty and makes appropriate safety recommendations. It also applies to the investigation of injuries sustained by a person in a casualty resulting in incapacitation for more than 72 hours commencing within seven days from the date of injury. A set of guidelines to assist investigators in the implementation of the Code are included in its Appendix. It is expected that the ILO/IMO *Guidelines on investigation of human factors in marine casualties and incidents* (prepared by a joint ILO/IMO Working Group in 1997 and 1998) will be annexed to the Code through an IMO Assembly Resolution.

## OTHER RELATED IMO CONVENTIONS

Other IMO Conventions that have particular relevance to safety and health in fishing include the International Convention on Maritime Search and Rescue, 1979, and the Convention on the International Regulations for Preventing Collisions at Sea (COLREGS), 1972 (as amended). Finally, the International Aeronautical and Maritime Search and Rescue Manual, whose purpose is to assist States in meeting search and rescue needs, contributes significantly to improving success rates in the rescue of fishermen.

This list of international conventions and recommendations shows that profound effort has already been invested at an international level in improving safety at sea. This work has been meticulously done, taking into account the design and construction of vessels, stability, load lines, mechanical equipment and gear, safety equipment, communications, effects of weather and icing, working conditions and hours, training of licensed personnel, etc. Thus, as has been repeatedly pointed out, there is no lack of regulations and administrative guidelines. What is missing is their effective enforcement at national level.

## REGIONAL ARRANGEMENTS

Some countries have included the issue of safety at sea in the workplans of regional bodies or organizations (such as the Organization of East Caribbean States (OECS)<sup>29</sup>, the Sub Regional Fisheries Commission of North West African States<sup>30</sup>, the South Pacific Commission (SPC)<sup>31</sup> and the Bay of Bengal Programme (BOBP)<sup>32</sup>, and in some cases, they have linked these to fisheries management. Such arrangements will be of value during the formulation of standards intended to be adopted by all member countries through a programme for the harmonization of fisheries regulations.

## APPLICATION OF CONVENTIONS AND REGULATIONS TO FISHERIES

Although many nations have adopted legislation concerning safety at sea, there is in fact no international convention in force that deals specifically with the safety of fishing vessels, largely because the great variations in design and operation between fishing vessels and other types of ships have always proved a major obstacle to their inclusion.



At the national level, this same reason has hindered the inclusion of fishing vessels in regulations formulated by maritime administrations, while at the same time, industry representatives have, in some cases with success, lobbied for exemption for a variety of reasons. This reflects reluctance on behalf of the fishing industry to be subjected to a comprehensive regulatory programme. Fisheries have a long tradition of independence; many regard fisheries as the last frontier of free enterprise and resent government involvement, which may be perceived by the industry as being inadequately informed of the risks and nature of fishing operations, or of the slim profit margins which might be eroded by the mandatory compliance with regulations on training, vessel construction and equipment. Additionally, legislators may refrain from imposing laws or regulations on the fisheries that lead to additional costs or may otherwise be perceived as repressive. The U.S. Coastguard for example has repeatedly advocated the licensing and training of commercial fishing vessel crews, to no avail. The U.S. Congress has indeed drafted such legislation, but not enacted it into law. Research in the area of safety at sea for commercial fishermen in the USA has largely focused on the implementation and effectiveness of safety regulations. Findings strongly assert that fishermen's perceptions regarding safety can vary greatly from those of the government, including the Coast Guard, and that there needs to be a better understanding of the fishing culture and ways in which safety is viewed. These findings underscore the need to involve fishermen in the safety regulatory process; the "human factor" associated with safety at sea coupled with the cognitions and input of fishermen all provide essential information needed to make safety regulations more effective.<sup>33</sup>

Government policy to regulate for safety at sea in the fishing industry must be accompanied by a total commitment to implement that regulatory regime, along with the necessary resources. Implementation encompasses a set of strategies which might include education, assistance, persuasion, promotion, economic incentives, monitoring, enforcement and sanctions, all of which are accompanied by the setting up or improvement of administrations and associated costs. Implementation must be considered at every phase of the regulation formulation, and not considered as a final consequence of regulation.

While it may be true that "legislation is only as good as its enforcement", legislation cannot be improved by enforcement. The quality of the legislation remains the limiting factor. In many parts of the world, additional regulations for fisheries are not required. The overriding need is for regulations to be reviewed and amended to reflect the problems and their root causes; the process of regulatory review must be as dynamic as the industry being regulated. Thus it is clear that the industry must be part of this process. The regulators and the regulated need the necessary training to ensure compliance and enforcement as well as a working relationship promoted by mutual respect and trust.<sup>34</sup> The establishment of National Sea-Safety Working Groups might be a step in the right direction. In some places the infrastructure necessary for enforcement hardly exists and would have to be built from scratch.

16 The world fishing fleet, in *The State of World Fisheries and Aquaculture 1998*:66-69. FAO, Rome, 1999.

17 IMO Resolution A.562(14) - Recommendation on a severe wind and rolling criterion (weather criterion) for the intact stability of passenger and cargo ships of 24m in length and over.

18 IMO Resolution A.599(15) - Avoidance by submerged submarines of fishing vessels and their fishing gear.

19 Considerable confusion exists as to the proper use of the acronym UNCLOS with reference to the United Nations *Conferences* and *Convention* on the Law of the Sea. For a useful discussion on the topic see *The International Journal of Marine and Coastal Law*, Vol 15, No 3, Kluwer Law Journal International, 2000-12-07.

20 <http://www.un.org/Depts/los/losconv2.htm>

21 The clause on 200 mile EEZs had been agreed upon in 1976 with the effect that a number of nations extended their EEZs without delay.

22 The United Nations Convention on the Law of the Sea, Part VII "High Seas", Section 1 "General Provisions", Article 94, "Duties of the flag State", paragraphs 1 and 3.

23 The 1993 Protocol has been ratified by only six States (Cuba, Denmark, Iceland, Italy, Norway and Sweden), and it is unlikely that it will ever enter into force, which would occur one year after not less than 15 States, the aggregate number of whose fishing vessels of 24m in length and over is not less than 14,000, have ratified the Protocol.

24 Denmark and Russia.

25 Certain parts of the Code are based on the 1982 UN Convention. It is to be interpreted and applied in conformity with the relevant rules of international law as reflected in the 1982 UN Convention, and in a manner consistent with the relevant provisions of 1995 UN Fish Stocks Agreement, as well as in the light of 1992 Declaration of Cancun, the 1992 Rio Declaration on Environment and Development, and Agenda 21, especially Chapter 17. The FAO Compliance Agreement is an integral part of the Code. See Articles 1 and 3 of the Code.

26 Reference is made to issues directly pertaining to safety in paragraphs 6.17: 8.1.5: 8.1.6: 8.1.7, 8.1.8, 8.2.5: 8.3.2: and 8.4.1

27 Personal communication Dr. D. Doulman, Senior Fishery Liaison Officer, Fishery Policy and Planning Division, FAO.

28 FAO Technical Guidelines for Responsible Fisheries: No 1. Fishing operations; No 1. Fishing Operations (Supplement 1) Vessel Monitoring Systems; No 2. Precautionary Approach to Capture Fisheries and Species Introduction; No 3. Integration of Fisheries into Coastal Area Management; No 4. Fisheries Management; No 5. Aquaculture Development; No 6. Inland Fisheries; No 7. Responsible Fish Utilisation; No 8. Indicators for Sustainable Development of Marine Capture Fisheries.

29 Antigua and Barbuda, Commonwealth of Dominica, Grenada, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines

30 Mauritania, Cap Verde, Senegal, the Gambia, Guinea Bissau and Guinea.

31 Australia, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Republic of the Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu.

32 Bangladesh, India, Indonesia, Malaysia, Maldives, Sri Lanka and Thailand.

33 Kaplan, M and Kite-Powell, HL: Safety at Sea and fisheries management: fishermen's attitudes and the need for co-management. Marine Policy, November, 2000.

34 Turner, J. Factors Governing the Development of National Rules and Regulations for the Construction and Equipment of Small Fishing Vessels. IFISH Conference, 2000.

