



Fishing is one of the most dangerous occupations in the world. According to the International Maritime Organization (IMO), 80% of accidents on boats are caused by human error and most of these errors can at some point be attributed to management deficiencies that create the pre-conditions for accidents. To address these issues, the following actions must be taken:

- Personnel must be effectively managed to ensure that they have appropriate training and that they work in accordance with relevant labour laws and agreed conditions;
- Procedures, methods and systems used on fishing vessels must be well managed to ensure that they are effective and efficient and produce the required outcomes;
- All vessel parts (hull, machinery, fishing gear, etc.) must be managed to ensure they are properly maintained and perform in accordance with their design capacity.

The solutions for improving fishing vessel safety are thus straightforward:

- safety-oriented management
- well-trained and competent crews
- seaworthy vessels

To ensure the seaworthiness of vessels, there must be standards in place for their design, method of construction, materials, equipment and outfit, as well as standards for maintenance and inspection – in other words, a regulatory system designed to oversee the fundamentals of safe operation. These standards must be universally adopted, which requires some type of binding international agreement. The Torremolinos Convention and its 1993 Protocol provide the necessary framework.

Just as important as the standards for vessels, there must be standards for the crew, their training, qualifications and methods of work. Because fishing is a global industry that operates in open seas and interacts with other maritime industries, it is also important that common crew training standards are used, particularly when it comes to qualification and certification. Those standards must be universally adopted and recognised. This is the purpose of the Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel, 1995 (STCW-F Convention).



1977 Torremolinos Convention and its 1993 Protocol:

The safety of fishing vessels has been a matter of concern for the IMO since it came into existence. In 1977, the first international conference on the safety of fishing vessels was held in Torremolinos, Spain. The conference adopted the Torremolinos Convention (1977), which established a safety regime for fishing vessels of more than 24 m. The convention looked at construction standards and safety-related equipment for fishing vessels in a similar way to that of the SOLAS Convention for cargo and passenger vessels. However, it was considered too stringent by the major fishing nations, and as such, was never ratified.

In 1993, a Protocol to the Convention was adopted (Torremolinos Protocol). The protocol updates and amends the 1977 convention taking into account technological advances and the need to take a pragmatic approach to encourage ratification of the instrument. The safety provisions of the protocol cover construction, stability, machinery, fire protection, protection of crew, lifesaving equipment, emergency procedures, radio communication, navigation equipment, vessel certification and port state control. Some of the provisions are restricted to fishing vessels of more than 45 m. At the end of 2006, six states had ratified the protocol. Nine more signatories are required for it to enter into force.

In an effort to take into account local specificities, some protocol articles allow national administrations to apply the provisions of the protocol to certain classes of vessels (e.g. vessels less than 24 m in length) or to amend some provisions to match local conditions (e.g. weather conditions and operational features of fishing fleets). The development of regional standards is also encouraged by IMO, if they are seen as necessary and practical. Such regional standards may even be developed, in consultation with IMO, without awaiting the entry into force of the protocol.

Once adopted, the Torremolinos Protocol will impose a number of obligations on flag states and national administrations to ensure their vessels comply with its requirements. In addition to conventional enforcement measures (surveys and certification), regular reporting of information (text of laws, reports on casualties and accidents involving fishing vessels) to IMO will be required. Administrations will also need to certify each vessel for the purpose of port state control.





1995 STCW-F Convention:

The International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel (1995) complements the Torremolinos Protocol by setting the regulatory framework for the training and certification of fishing vessel personnel. STCW-F is the "sister" convention to the 1978 STCW Convention (Training and Certification of Seafarers), as amended in 1995, with similar provisions. The convention is the first attempt to make safety standards for crews of fishing vessels mandatory internationally.

The STCW-F Convention addresses training and certification standards for skippers and watchkeepers on fishing vessels of more than 24 m, for engineers on vessels of more than 750 kW and for crew in charge of radio communication. Importantly, it also requires basic (pre-sea) safety training for all fishing vessel personnel. The convention embraces the concept of competency-based training but does not deal with manning levels.

While the convention specifically relates to large fishing vessels, the IMO encourages national administrations to address the training and certification standards for crew of smaller vessels through relevant domestic laws. As with other IMO instruments, collaboration between countries, and with IMO, will be possible to facilitate the implementation of the convention and to help maritime administrations meet their obligations. For instance, the convention allows cross-recognition of certificates and training of fishing vessel personnel on a regional basis.

At the end of 2006, the STCW-F Convention had been ratified by six states. It will enter into force 12 months after it has been accepted by 15 countries.





Document for Guidance on Training and Certification of Fishing Vessel Personnel:

First published in 1985, then thoroughly revised in 2001, the document combines the conventions and recommendations adopted by the International Labour Organization (ILO) and IMO with the wide practical experience of the Food and Agriculture Organization of the United Nations (FAO) in the field of training for fishermen.

The document is aligned with the provisions of the STCW-F Convention and provides a guide to establishing a framework for training fishing vessel personnel appropriate to the size and nature of the fishery (all sizes of fishing vessels are covered). It addresses issues such as methods of training and assessment (competency-based training is promoted), content and duration of training programmes, competences to be assessed, and tutor experience and qualifications. There is a strong emphasis on sustainability (FAO Code of Conduct), fatigue management, and the active involvement of all parties during the development of training programmes.





How would the Pacific Region cope?

Some of the likely impacts of the Torremolinos Protocol and 1995 STCW-F Convention on the Pacific Islands were discussed during a regional seminar held in Fiji in March 2006. The following points were noted:

- The Pacific is well ahead of other regions in that it already has training and certification standards for fishing vessel personnel. In the mid 1990s, the Secretariat of the Pacific Community (SPC) developed a common certification structure for trading and fishing vessels, which is regularly revised by a subcommittee of the Pacific Islands Maritime Association (PacMa). Most Pacific Island countries have adopted it.
- A number of model training programmes for fishing vessel personnel are available and used throughout the region (e.g. SPC Safety Certificate, SPC/Pacific Island Qualified Fishing Deckhand Certificate, etc.). The pre-sea induction training system used in Papua New Guinea is also aligned with the requirements of STCW-F for basic pre-sea safety training for all fishing vessel personnel.
- While the protocol and convention apply to large fishing vessels (>24 m), it is possible for national laws to extend their applicability to smaller classes of vessels.
- National administrations and the regional fishing industry need to be familiar with the provisions of the protocol and convention and prepare for their entry into force. The current status of requirements and standards in the region means that their effective implementation should be relatively straightforward.
- Due to the current limited number of signatories, ratification of the protocol and convention by Pacific Island countries could drive their entry into force.
- SPC could underpin a regional mechanism and be the focal agency in assisting countries with the implementation of the protocol and convention.

The introduction of relevant standards for vessel safety and crew training can only provide a safer working environment, improved safety, wider employment options and a more sustainable livelihood for fishing vessel personnel in the Pacific region.

But the change will have a cost for fishing vessel operators (upgrading of safety systems), training institutions (wider application of competency-based training and assessment), and national administrations (certification and surveys). These cost implications need to be carefully assessed.

SPC and the Forum Fisheries Agency (FFA), through the EU-funded DEVFISH project, will soon undertake a regional study of these issues, the results of which will be widely circulated to the fishing industry and national administrations.

The extent of the safety problem in the global fishing industry*:

- An average of 24,000 fatalities and 24 million non-fatal accidents** happen each year in the fishing industry
- The fatality rate in the fishing industry is estimated at 80/100,000 per annum, 79 times higher than the overall occupational fatality rate

The community nature of much of the world's fishing activity and the potentially devastating impact that high injury and fatality rates can have on fishing communities are also clearly apparent:

- In 1995, the total world fishing fleet was about 3.8 million vessels
- About 15 million persons are employed aboard fishing vessels and about 98% work on vessels less than 24 m in length
- The world's fishing fleet mostly comprises boats that operate in artisanal fisheries

* *Statistics from ILO, IMO and FAO*

** *Non-fatal injuries are grossly under-reported according to ILO*

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