COMPREHENSIVE REVIEW OF THE 1995 STCW-F CONVENTION

Draft amendments to provide sustainable fisheries training for all fishers

Submitted by Netherlands, FAO and ITF

SUMMARY

Executive summary: This document contains a proposal to include new provisions on training for fishing vessel personnel in sustainable fisheries and marine environmental awareness both in chapters II and III of the STCW-F Convention.

Strategic direction, if applicable: 1

Output: 1.22

Action to be taken: Paragraph 30

Related documents: HTW 4/6/7; HTW 5/WP.4; HTW 6/6/4, HTW 6/INF.8 and resolution MEPC.310(73)

Introduction

1 The Maritime Safety Committee (MSC), at its ninety-fifth session, agreed to include in the agenda of the HTW Sub-Committee a new output on “Comprehensive review of the 1995 STCW-F Convention” to align its standards as much as possible with the current state of the fishing industry.

2 At HTW 4, Japan proposed a way forward for the comprehensive review of the 1995 STCW-F Convention in document HTW 4/6 including draft revised regulations and new draft STCW-F Code.

3 HTW 5 endorsed the purpose to work towards the alignment of the STCW-F Convention with the 1978 STCW Convention, as amended, including the 2010 Manila Amendments.

The Sub-Committee considered document HTW 6/6/4 (Japan and ITF) and HTW 6/INF.8 (Netherlands), recognized the importance of developing more detailed requirements on basic safety training in line with the 1978 STCW Convention, as amended, and referred the matter to a Working Group for further consideration and advice. Furthermore, the Working Group on the Comprehensive Review of the 1995 STCW-F Convention at HTW 5 (HTW 5/WP.4) agreed to include, in knowledge, understanding and proficiency under competence 13 (Monitor compliance with legislative requirements) in table A-II/2, the need for basic working knowledge of relevant international instruments concerning the responsible conservation, management and development of living aquatic resources as well as key instruments related to the fight against illegal, unreported and unregulated (IUU) fishing.

Background

Sustainable development, and the importance of the involvement of the human element to achieve this, has become much more important and urgent in the last decade. IMO is playing a leading role in the promotion of sustainable development of the maritime industry.

Sustainable development of the maritime industry is part of the vision of IMO for the period 2018-2023 in the *Strategic Plan for the Organization for the six-year period 2018 to 2023* (resolution A.1110(30)):

1. IMO will uphold its leadership role as the global regulator of shipping, promote greater recognition of the sector’s importance and enable the advancement of shipping, while addressing the challenges of continuing developments in technology and world trade and the need to meet the 2030 Agenda for Sustainable Development.

2. To achieve this, IMO will focus on the review, development and implementation of and compliance with IMO instruments in its pursuit to proactively identify, analyse and address emerging issues and support Member States in their implementation of the 2030 Agenda for Sustainable Development.”

Climate change has been recognized by IMO as one of the areas of focus (Strategic direction) for the period 2018 to 2023. Although shipping is one of the most energy-efficient modes of transportation and has already increased its energy efficiency and reduced emissions, the maritime industry continues to pursue strategies to reduce emissions worldwide. In its role as the global regulator of international shipping, IMO develops appropriate solutions to reduce the maritime industry’s contribution to air pollution and its impact on climate change. The Marine Environment Protection Committee (MEPC) adopted the *Initial IMO Strategy on reduction of GHG emissions from ships* (resolution MEPC.304(72)) on 13 April 2018.

IMO has pledged to further address the significant problem posed by plastics to the marine environment with the adoption of an action plan which aims to enhance existing regulations and introduce new supporting measures to reduce marine plastic litter from ships. MEPC adopted the *Action plan to address marine plastic litter from ships* (resolution MEPC.310(73)) on 26 October 2018 to contribute to the global solution to prevent marine plastic litter entering the oceans through ship-based activities.

The safety and security of life at sea, protection of the environment, and world trade all depend on the competence and professionalism of the personnel employed or engaged in the maritime sector (the human element), who need to have the relevant knowledge, understanding and proficiency to ensure that IMO instruments are effectively reviewed, developed, implemented, applied and enforced.
The STCW Code, as amended in 2010, introduced mandatory minimum requirements related to marine environmental awareness and the prevention of pollution for all seafarers. In January 2011, the Sub-Committee on Standards of Training and Watchkeeping (STW), at its forty-second session, validated model course 1.38 on Marine environmental awareness. This model course specifically focuses on the contribution of the human element to the prevention of pollution and is intended to educate, stimulate and empower officers on board ships to contribute to environmentally sound shipping and to ensure compliance with pollution prevention measures. This model course is closely connected to references in tables A-II/1, A-III/1 and A-III/6 of the STCW Code.

In 2018, MEPC adopted the Action plan to address marine plastic litter from ships (resolution MEPC.310(73)), which identifies several actions that are related to the human element. MEPC agreed actions to be completed by 2025, which relate to all ships, including fishing vessels. One of these actions is the measure to “Consider tasking the HTW Sub-Committee with reviewing chapter III of the STCW-F Code (Basic safety training for all fishing personnel) to ensure that all fishing vessel personnel receive basic training on marine environment awareness oriented on marine plastic litter including abandoned, lost or otherwise discarded fishing gear”.

In April 2019, the OSPAR Convention, a regional commission for the maritime environment, established a recommendation and guidelines on the issue of reducing marine litter by implementing Sustainability Education Programmes for Fishers. The purpose of the recommendation is to inspire and assist contracting Parties, fishing academies and training institutes, their teaching staff and other experts to implement sustainability training for fishers, with the ultimate goal to offer basic sustainability training for all fishers and to implement sustainability as a structural element in the education of future fishers in the OSPAR region with the aim to empower (future) fishers to protect fish stocks and the sea environment for future generations. The training course aims to help (future) fishers find a balance between planet (environmental challenges), profit (economic viability) and people (acceptance of your business by society (a license to operate) in shaping their sustainable and successful businesses.

At HTW 4, FAO submitted document HTW 4/6/7, which explained the links between the 1995 FAO Code of Conduct for Responsible Fisheries (CCRF) and the STCW-F Convention. The CCRF provides the principles and standards for the conservation, management and development of fisheries, and places considerable emphasis on the training of fishers in the implementation of its provisions. The CCRF, which was developed with IMO inputs, inter alia, outlines the responsibilities of States to enhance, through education and training programmes, the education and skills of fishers and their professional qualifications on marine conservation, fisheries operations and management.

The 2001 IMO/ILO/FAO Document for Guidance on Training and Certification of Fishing Vessel Personnel acknowledges the need for fishing vessel personnel to receive training in the principles and guidelines of the CCRF. Similarly, the 2005 IMO/ILO/FAO Code of Safety for fishermen and fishing vessels: Revised Part A, approved by MSC 79 in 2004, describes inter alia in chapter 3 (Education, training, safety awareness and related issues) that knowledge about fisheries management is important and that safety at sea should be considered an integral part of fisheries management. To give effect to the implementation of the previously endorsed safety Code and Guidance document, it is obvious that fisheries sustainability concerns require attention in training and certification programmes of fishing vessel personnel.

* OSPAR is the mechanism by which 15 Governments and the EU cooperate to protect the marine environment of the North-East Atlantic.
Discussion

The need for sustainable fisheries training

16 The 1978 STCW Convention, as amended, contains requirements for training regarding the prevention of pollution and the protection of the marine environment. However, in principle the STCW Code does not apply to fishing vessel personnel.

17 The last decade, sustainable development has become a powerful driving force behind (large and rapid) changes in the fishing industry. A better understanding of this "engine" is essential to be able (and willing) to understand and follow these changes so all fishers can play the professional role needed during those changes. In addition, it has become even clearer in the last decade how urgent several sustainability issues are, such as air emissions/CO₂ and plastic marine litter, and, how important (competent, conscious and motivated) crews are to resolve these issues. For example, plastic marine litter from ships is for a large part caused by crew behaviour and not by lack of regulation. In the process of sustainable development so far, there has been an emphatic attention for the environment and conservation of fish stocks, but much less for the environmental stewardship role of fishers.

18 While recognizing the preference to align requirements for fishing vessel personnel in the STCW-F Code as much as possible with the requirements in the STCW Convention for seafarers, the co-sponsors recognize that the fishing industry has specific characteristics that must also be considered in light of the need for education about sustainability of fishing vessel personnel.

19 Prevention and reduction of pollution by fisheries is part of a broader concept of being a fisher in a changing world. Being a fisher today is different compared to 10 or 20 years ago. The job has changed due to increasing costs, more and complex regulations, farmed fish products on the market, and a higher demand for responsible and sustainable fish products. In addition, our seas are used for more than fishing alone, so fishing grounds are under pressure. Also, and partially as a reaction to these developments, the fishing sector itself has experienced great changes in the past 10 years, such as new fishing techniques, development of certification schemes and more market-focused thinking. The way society perceives the environmental impacts of fishing is changing and fishers are operating in a world with multiple stakeholders. To continue to successfully operate in a changing society and the changing fishing sector, competences of those working in the sector need to evolve and grow. For the fishing industry to develop sustainably, fishing vessel personnel need additional skills, knowledge and information. A sustainable fishing industry needs sustainability education and marine environmental awareness training.

20 Sustainable development in environmental, economic and social terms has in recent decades gained international attention in fisheries. This is reflected in many internationally binding agreements and conventions, such as 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 (UNFSA), the FAO Agreement on Port States Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated fishing (PSMA), the ILO Work in Fishing Convention (C188) and the IMO Cape Town Agreement of 2012 (CTA). These agreements and conventions are being integrated in national legal frameworks, fisheries policies and regulations. In addition, developments under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Convention on Biological Diversity (CBD), within regional fisheries management organizations (RFMOs) and in regional economic cooperation frameworks, are highly relevant for the fisheries sector stakeholders and have an impact on the fishing operations, and the knowledge and skills needed for conducting fishing.
operations in a sustainable manner. Each of the international agreements and cooperative frameworks call upon States and all fisheries stakeholders to build capacity for their effective implementation, and particularly to provide assistance to developing countries for developing capacity for implementation.

21 Capacity-building and training of fishing vessel personnel on the knowledge, understanding and proficiency needed for implementation and the measures to be applied by them under each of these international and regional agreements is currently being promoted by the agencies responsible for technically supporting implementation, but this is generally done in an ad hoc, project-based and incoherent manner.

22 The STCW-F could, by integrating sustainable fisheries training, become the main instrument for training and education of fishers on fishing safety, operational matters as well as for social and environmental sustainability subjects. Such an approach would increase the relevance of the STCW-F Convention for current Parties and potential State Parties, and would be highly cost-effective and reduce overlap and duplication of efforts.

**Sustainable fisheries training for all fishing vessel personnel**

23 The co-sponsors have considered that STCW-F requirements in chapter II of the Convention are limited to skippers, officers, engineer officers and second engineer officers aboard fishing vessels of 24 metres in length or more and chief engineer officers and second engineer officers of fishing vessels with propulsion power of 750 kW or more (HTW 6/INF.8). Requirements for all other duties, regardless the size of the fishing vessel or propulsion power of the fishing vessel, are limited to the requirements for fishing vessel personnel in charge of or performing radiocommunication duties on board fishing vessels and the basic safety training for all fishing vessel personnel on all fishing vessels. For most of the fishing vessel personnel on the world’s fishing fleet, the basic training is the only training requirement under the Convention.

24 More than 98% of the world's fishing fleet of approximately 4.7 million fishing vessels consists of vessels smaller than 24 metres. Sustainability training, similarly as basic safety training, is important for fishing vessel personnel on large as well as small-scale vessels. Therefore, the co-sponsors consider it of great importance to include basic requirements regarding sustainable fisheries as a separate basic sustainable fisheries training for all fishing vessel personnel in chapter III of the STCW-F Convention.

25 Timing to receive the basic sustainable fisheries training is specified as "before being assigned to any shipboard duties" in line with present text of chapter III of the STCW-F Convention in the application of the basic safety training for all fishing vessel personnel. Basic sustainable fisheries training, as set out in annex 1, could also be linked to the mandatory every 5 years refresher course, as is being proposed in the revision process for basic safety training.

**Additional sustainable fisheries training for officers**

26 The co-sponsors recognized that for shipboard duties as mentioned in chapter II of the STCW-F Code, additional minimum requirements for sustainable fisheries on board fishing vessels of 24 metres in length or more or with a propulsion power of 750 kW or more would be appropriate for consideration by the Sub-Committee.

27 Additional requirements in chapter II, part A of the draft STCW-F Code are described in annex 2. Part A contains mandatory provisions and gives, in detail, the minimum standards required to be maintained by Parties in order to give full and complete effect to the provisions of the STCW-F Convention. The requirements regarding sustainable fisheries training are
based on the existing requirements for officers in the STCW Code, as amended, and upon the opinion that officers of fishing vessels of 24 metres in length or more, and for engineer officers of fishing vessels with propulsion power of 750 kW or more, should have the (standard) competence, understanding and responsibility to apply existing regulations and procedures regarding sustainable fisheries.

28 Additional requirements in chapter II, part B of the draft STCW-F Code are described in annex 3. Part B contains recommended guidance to assist Parties to the STCW-F Convention and those involved in implementing, applying or enforcing its measures to give the STCW-F Convention full and complete effect in a uniform manner. The requirements regarding sustainable fisheries training give more in-depth information in the application of the concepts of sustainable development in the fishing industry.

Proposal

29 Taking into account the above discussions, the co-sponsors propose amendments to chapter II and chapter III of the STCW-F Convention, as set out in the annexes, to include sustainable fisheries training in the draft STCW-F Code with special emphasis on marine plastic litter (resolution MEPC.310(73)) and reduction of CO\textsubscript{2} emissions (resolution MEPC.304(72)).

Action requested of the Sub-Committee

30 The Sub-Committee is invited to consider the proposed amendments set out in the annexes and take action as appropriate.

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ANNEX 1

PROPOSED PROVISIONS IN CHAPTER III OF PART A OF THE DRAFT STCW-F CODE
(Standards regarding basic sustainable fisheries training for all fishing vessel personnel)

Section A-III/2
Mandatory minimum requirements for basic sustainable fisheries training for all fishing vessel personnel

Sustainable fisheries training

1. Fishing vessel personnel shall, before being assigned to any shipboard duties:
   .1. receive appropriate approved basic sustainable fisheries training in:
      .1. sustainable fisheries;
      .2. prevention of pollution of the marine environment; and
      .3. efficient use of energy and reduction of air emission
   as set out in table A-III/2.
   .2. be required to provide evidence of having achieved the required standard of competence to undertake the tasks, duties and responsibilities listed in table A-III/2 through:
      .1. demonstration of competence, in accordance with the methods and the criteria for evaluating competence tabulated in columns 3 and 4 of those tables; and
      .2. examination or continuous assessment as part of an approved training programme in the subjects listed in column 2 of table A-III/2.

2. Fishing vessel personnel qualified in accordance with paragraph 1 in basic sustainable fisheries training shall be required, every 5 years, to provide evidence of having maintained the required standard of competence, to undertake the tasks, duties and responsibilities listed in column 1 of table A-III/2.

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<thead>
<tr>
<th><strong>Column 1</strong></th>
<th><strong>Column 2</strong></th>
<th><strong>Column 3</strong></th>
<th><strong>Column 4</strong></th>
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</thead>
<tbody>
<tr>
<td>Competence</td>
<td>Knowledge, understanding and proficiency</td>
<td>Methods for demonstrating competence</td>
<td>Criteria for evaluating competence</td>
</tr>
<tr>
<td>Define sustainable fisheries</td>
<td>Understanding that sustainable development requires a balance of social responsibility (People), care for the environment (Planet) and economic prosperity (Profit)</td>
<td>Examination and assessment of evidence obtained from approved instruction or attendance at an approved course</td>
<td>Description of sustainable development, and apply to three P’s (People, Planet and Profit) to the fishing industry</td>
</tr>
<tr>
<td>Recognize the ocean as a diverse and valuable environment</td>
<td>Basic knowledge of marine ecology and understanding of the complexity and diversity of the marine environment</td>
<td>Examination and assessment of evidence obtained from approved instruction or attendance at an approved course</td>
<td>Description of basic marine ecology principles, including an example of a marine food chain</td>
</tr>
<tr>
<td>Take precautions to prevent pollution of the marine environment</td>
<td>Basic knowledge of the (main) impact of fishing on the environment and the effects of operational or accidental pollution</td>
<td>Examination and assessment of evidence obtained from approved instruction or attendance at an approved course</td>
<td>Naming of the main impacts of fishing on the environment</td>
</tr>
<tr>
<td>Prevent plastic pollution to the (marine) environment</td>
<td>Knowledge of the impacts of plastic waste in the marine environment</td>
<td>Examination and assessment of evidence obtained from approved instruction or attendance at an approved course</td>
<td>Description of the impacts of plastics</td>
</tr>
</tbody>
</table>

Organizational procedures designed to safeguard the marine environment are observed at all times.

**Table A-III/2**

*Specification of minimum standard of competence in basic sustainable fisheries*
<table>
<thead>
<tr>
<th><strong>Recognition and measures to be taken to prevent pollution, including by abandoned, lost or otherwise discarded fishing gear (ALDFG) and fish packing material</strong>&lt;br&gt;Be able to properly handle garbage, as defined in MARPOL Annex V, aboard ships and the correct disposal in ports</th>
<th><strong>Contribute to the efficient use of energy and reduction of air emissions</strong>&lt;br&gt;Knowledge of the impacts of air emissions to the environment&lt;br&gt;Understanding the urgency of climate change and the way the maritime sector contributes to the problem&lt;br&gt;Be able to contribute to the efficient use of energy and the reduction of air emissions</th>
<th><strong>Ensure a positive reputation of the fishing industry</strong>&lt;br&gt;Understanding the importance of interaction with society, transparency and accountability to ensure a good reputation and a &quot;license to operate&quot;</th>
<th><strong>Description of the impacts of air emissions</strong>&lt;br&gt;Organizational procedures designed to contribute to efficient use of energy are observed at all times</th>
<th><strong>Examination and assessment of evidence obtained from approved instruction or attendance at an approved course</strong></th>
<th><strong>Provision of examples of consequences of positive/negative reputation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information about (inter)national regulations and procedures of handling garbage aboard ships and in ports, combined with the understanding of the impacts of plastics in the marine environment, enables all fishing vessel personnel to contribute to the prevention of pollution by plastic marine litter, the correct disposal of all plastics used on board, including fish packing material and the issue of abandoned, lost or otherwise discarded fishing gear (ALDFG)</strong></td>
<td><strong>Information about (inter)national regulations, procedures and innovations, combined with understanding of the urgency and issue of climate change, encourages fishing vessel personnel to use energy efficiently, including but not limited to the use of energy efficient fishing techniques, slow steaming, alternative fuels/energy sources and energy friendly behavior.</strong></td>
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2 Information about (inter)national regulations and procedures of handling garbage aboard ships and in ports, combined with the understanding of the impacts of plastics in the marine environment, enables all fishing vessel personnel to contribute to the prevention of pollution by plastic marine litter, the correct disposal of all plastics used on board, including fish packing material and the issue of abandoned, lost or otherwise discarded fishing gear (ALDFG).

3 Information about (inter)national regulations, procedures and innovations, combined with understanding of the urgency and issue of climate change, encourages fishing vessel personnel to use energy efficiently, including but not limited to the use of energy efficient fishing techniques, slow steaming, alternative fuels/energy sources and energy friendly behavior.
ANNEX 2

PROPOSED PROVISIONS IN CHAPTER II OF PART A OF THE DRAFT STCW-F CODE

1 These draft mandatory requirements for skippers, officers in charge of a navigational watch, chief engineers, second engineers and personnel in charge of or performing radiocommunication duties, in limited and unlimited waters should be included in the corresponding tables of sections A-II/1 to A-II/6 of the draft STCW-F Code.

Table A-II/[…]  
*Specification of minimum standard of competence […]*

<table>
<thead>
<tr>
<th>Function: Sustainability of fisheries and environmental protection at the […] level</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>Knowledge, understanding and proficiency</td>
<td>Methods for demonstrating competence</td>
<td>Criteria for evaluating competence</td>
<td></td>
</tr>
<tr>
<td>Ensure compliance with pollution prevention requirements</td>
<td>Knowledge of the impacts of fishing on the environment</td>
<td>Examination and assessment of evidence obtained from approved instruction or attendance at an approved course</td>
<td>Legislative requirements relating to protection of the marine environment are correctly identified</td>
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<tr>
<td></td>
<td>Basic working knowledge of the relevant IMO Conventions concerning protection of the marine environment</td>
<td></td>
<td>Organizational procedures designed to safeguard the marine environment are observed at all times</td>
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<td></td>
<td>Knowledge of the precautions to be taken to prevent pollution of the environment</td>
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<td></td>
<td>Understanding the importance of proactive measures to protect the marine environment</td>
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<td></td>
<td>Be able to motivate crew to comply with requirements</td>
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<tr>
<td>Apply the principles of sustainable development to the fishing industry</td>
<td>Basic knowledge of appropriate international law embodied in international agreements and conventions concerning fishing management, including the FAO Code of Conduct for Responsible Fisheries</td>
<td>Examination and assessment of evidence obtained from approved instruction or attendance at an approved course</td>
<td>Legislative requirements relating to fisheries management are correctly identified and are observed at all times</td>
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</tr>
<tr>
<td></td>
<td>Understanding the importance of sustainable development of the fishing industry</td>
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ANNEX 3

PROPOSED PROVISIONS IN CHAPTER II OF PART B OF THE DRAFT STCW-F CODE

Section B-II
Guidance regarding mandatory minimum requirements for sustainable fisheries training for skippers and officers

1 This guidance applies to skippers and officers in charge of a navigational watch of fishing vessels of 24 metres in length and over; chief engineer officers, second engineer officers and officers in charge of an engineering watch in a manned engine-room or designated duty engineers in a periodically unmanned engine-room of fishing vessels powered by main propulsion machinery of 750 kW propulsion power or more; and personnel in charge of or performing radiocommunication duties, in limited and unlimited waters.

2 The training in advanced sustainable fisheries required in sections A-II/1 to A-II/6 should include the following theoretical and practical knowledge:

1 recognize economic aspects of sustainable fishing, including:

   .1 knowledge of economic aspects of fishing, including all costs and benefits associated with operating a fishing vessel;
   .2 understanding the position of fishers in the supply chain (the way in which fish travel from vessel to consumers); and
   .3 be able to identify ways to make fishing more economically sustainable;

2 apply fishing management and conservation principles, including understanding:

   .1 the need of fishing management for the sustainable development of the fishing industry and the international instruments to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing;
   .2 the roles of scientists and governments in fisheries management; and
   .3 the goals of different elements of fishing management, including responsible harvesting practices and responsible fishing gear/selectivity as mentioned in the FAO Code of Conduct for Responsible Fisheries; and

3 recognize the social aspects of sustainable fisheries, including:

   .1 understanding that care for the human element (social equity) and interaction with society (societal acceptance) are part of a sustainable fishing industry;
.2 understanding the elements of fair treatment of fishing vessel personnel, including but not limited to fair wages, safe working conditions and humane treatment; and

.3 basic knowledge of relevant ILO conventions and national legislation concerning safe and humane working conditions.