

Comprehensive Revision of STCW Convention in order to Facilitate Standardization of the Global MET Systems: A Critique

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الخلاصة

بالرغم مما أنجزته الاتفاقية الدولية لمستويات التدريب وإصدار الشهادات للعاملين في البحر STCW 78 وتعديلاتها في وضع مستويات تدريب لكثير من الدول، ورفع مستويات التدريب في كثير من الدول الأخرى، فضلا عن توحيد مفاهيم التعليم والتدريب البحري في معظم الدول الأعضاء، إلا أنه كان هناك بعض نواحي القصور في الاتفاقية وعلي الأخص فيما يتعلق بنواحي التطبيق، لهذا السبب ومن أجل أن تظل الاتفاقية مواكبة للتطور التكنولوجي السريع في صناعة النقل البحري تجرى المنظمة البحرية الدولية حاليا مراجعة شاملة للاتفاقية ومدوناتها.

تم تجاهل عدد من المواضيع أثناء عملية المراجعة مما قد يؤثر سلبيا وبحول دون تحقيق الهدف من مراجعة وتعديل الاتفاقية. تستعرض هذه الورقة التعديلات المقترحة في بنود الاتفاقية كما تظهر بعض أوجه القصور التي يجب تداركها في التعديلات المستقبلية.

Abstract

The International Maritime Organization (IMO) is currently conducting the 2nd comprehensive revision to the provisions of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), as amended, and its associated Codes in order to keep pace with vast dynamic changes in the maritime industry.

Although, the main reason for revising the STCW Convention is to resolve inconsistencies in the previously revised Convention and to ensure it meets the new challenges facing the shipping industry today and in the incoming years, a number of vital issues were overlooked during the revision, which will result in weaknesses and shortcomings in the implementation process, such issues have to be considered by the organization in the future development of the Convention.

The following paper will review in brief the proposed amendments to STCW Convention, and will demonstrate some of the problem areas which IMO have to consider in future revisions of the Convention.

1. Introduction

IMO had adopted the STCW Convention in order to enhance the maritime safety and environmental protection by improving the performance of human element, as well as, establishing global minimum standards for seafarer's competency and for the administrations to ensure the compliance of its requirement.

The revised Convention has created roles for the maritime Administrations include, revealing and complying with the requirement of the Convention in its national law and legislations in the matters of certification, setting the required controls on the maritime education and training (MET) system in place and establish quality standard system.

In addition to that, and in order to ensure the continuous complying with the provision of the Convention, member states are required to communicate with the IMO to ensure proper implementation of the provisions of the Convention. Moreover, to make parties accountable to each other through the IMO for proper implementation to the provisions of the Convention and quality of their training and activities.

The impact of STCW 78/95 Convention, as amended, on the MET institutions included the reviewing and redesigning of all the training programmes, in order to comply with the competences specified in the STCW Code, in redesigning such courses special attention shall be given to the learning activities to include, lectures, hand on training, use of technology such as simulator based training.

Nevertheless, MET institutions must document all curriculum including, courses and training programmes, in order to submit it to the administration for approval prior placing them into force.

Above all, qualified instructors and lecturers; having sufficient experience in relation to the required level and standards of competence who may be involved in training shall be employed in the institutions. Moreover, good facilities and equipments including simulators shall be available, well maintained and upgraded regularly to meet the changing demands.

On the other hand, shipping company's roles include, adopting training policy, ensuring that seafarers employed by them meet the minimum standard of competence required by the administration. As well as, setting safety management system includes written procedures related to shipboard familiarization; contain emergency response and daily ship routine operations and use of equipments. Over and above, establishing work and rest schedule for watchkeepers.

Keeping in mind the dynamic nature of the shipping industry and the vast development in ship technology and operation, a 2nd major comprehensive revision of the Convention is in process by the IMO. According to Admiral Peter Brady, the Chairman of the IMO's STW sub-committee, the revised Convention should meet the objectives and challenges of the industry. It should provide global standards of training for seafarers for a considerable length of time thereafter.

2. Revision of STCW

The STCW Convention has been amended four times since the date of adoption in 1995, among those amendments:

- Setting minimum requirements for the training and qualification in crowd management and human behaviour in crisis situations of masters, officers, ratings and other personnel serving on board passenger ships other than Ro/Ro ferries.
- Setting minimum standards of operational and management competence for seafarers dealing with cargo handling and stowage on board bulk carriers.
- Proficiency of officers and ratings in ballast water management operations and treatment procedures.
- Setting minimum requirements for the issue of certificates of proficiency for ship security officers, and additional training requirements for the launching and recovery of fast rescue boats.

In view of this, the Secretary-General of the IMO at the opening of the 37th session of the Sub-Committee on Standards of Training and Watchkeeping (STW), remarked that perhaps the time had come to give some preliminary consideration to any need for another comprehensive review of the Convention to ensure that it meets, the new challenges facing the shipping industry today and in the years to come.

The Maritime Safety Committee (MSC) of IMO endorsed the request to review STCW and instructed STW in its 38th session to conduct a review of STCW Convention and its associated Codes to harmonize any inconsistencies and to meet the new challenges faced by the industry. However, it was agreed that the present structure of the Convention had more than adequately served its purpose and there was no need to review it.

Significant progress was made with the comprehensive review of the Convention in STW 39th and 40th sessions. MSC authorized the holding of an ad hoc intersessional meeting of STW working group in September 2008 followed by another ad hoc intersessional meeting in September 2009, to progress the work, further work will continue at STW 41st session in January 2010, with a view to adopting the amendments at a diplomatic conference of STCW parties in the Philippines in June 2010 and enter into force in 18 months thereafter.

3. Areas for Review

It was agreed that there was no need to review the articles of the Convention during the review process, amending the articles take a long time due to the ratification process., The key areas for revision were identified as those regulations in the chapters of the Annex to the Convention and the associated chapters in Code A and Code B, where the detailed technical provisions of the Convention are found.

The proposed amendments are to remove outdated provisions, cater to changes in technology and recent revisions in IMO Conventions or Codes. The revision of STCW will consider the following issues and relevant regulations:

3.1 Chapter (1) General Provisions

- Definitions - general provisions and addition of new ones.
- Regulation I/2 on certificates and endorsements, with a view to preventing the use of fraudulent certificates.
- Regulation I/3 principles and definition governing near-coastal voyages.
- Regulation I/6 on training and assessment, to ensure that Administrations maintain a register of training databases.
- Regulation I/8 on quality standards.
- Regulation I/9 on medical standards, with a view to developing international medical standards of fitness for all seafarers and a standard format for the medical fitness certificate in co operation with the International Labour Organization (ILO), World Health Organization (WHO) and the International Maritime Health Association (IMHA).
- Regulation I/10 on recognition of certificates, with a view to allow the issue of a "Proof of application for the issue of an endorsement" to Radio Officers and to clarify the level of the "necessary measures" that an Administration must undertake in order to endorse another Administration's certificates.
- Regulation I/11 on revalidation of certificates.
- Regulation I/12 on use of simulators, with a view to including provisions for new and innovative training methodologies.
- Regulation I/14 on responsibilities of companies, with a view to defining responsibilities of companies relating to continuous and familiarization training in all professional subjects involving onboard and shore-based training.

3.2 Chapter (2) Master and deck department

- Taking into account any recent changes in equipment, technology and terminology and to include familiarization training to understand the limitations of automatic systems. There should also be an emphasis on environmental awareness, in particular, the use of oily water separators.
- Regulation II/1 on mandatory minimum requirements for certification of officers in charge of navigational watch, to include mention of ECDIS training and familiarization.
- New regulation II/5 was adopted to set the mandatory minimum requirements for certification of deck ratings as able seafarer to cater for competence and training requirements for ship's ratings.

3.3 Chapter (3) Engine department

- Engine department is to include relevant competences with regard to electrical engineering and electronics in the operation of ships. The review should take into account any recent changes in equipment, technology and terminology and to include familiarization training to understand the limitations of automatic systems. There should also be an emphasis on environmental awareness, in particular, the use of oily water separators.
- New regulations III/5 was adopted to set the mandatory minimum requirements for certification of engine ratings as able seafarer to cater for competence and training requirements for ship's ratings

3.4 Chapter (4) Radiocommunication and radio personnel

Radiocommunications and radio personnel are to provide for familiarization training in accordance with MSC Circular No. MSC.1/Circ.1208, which specifies the recommendations concerning promoting and verifying continued familiarization of global maritime distress and safety system (GMDSS) operators on board ships.

3.5 Chapter (5) Special training requirements for personnel on certain types of ships

Special training requirements for personnel serving on certain types of ships, to include review of the requirements leading to dangerous cargo endorsements (DCEs), for seafarers and provision of training standards for dynamic positioning ships.

- Regulation V/1 and section A/V-1 on minimum requirements for masters, officers and ratings on tankers, with a view to developing liquefied natural gas (LNG) training and competency standards as well as addressing steam turbine propulsion requirements for LNG tankers.
- Regulations V/2 and V/3, to combine requirements for "ro-ro passenger ships" and for "passenger ships other than ro-ro passenger ships".

3.6 Chapter (6) Emergency, occupational safety, medical care and survival functions

Emergency, occupational safety, medical care and survival functions, to establish training standards for shipboard safety representatives, reflecting the requirements of the ILO Maritime Labour Convention, 2006; sanitation and hygiene, taking into account the information provided in the ship's sanitation guide developed by WHO and limited to addressing safety issues; and marine environment awareness.

3.7 Chapter (7) Alternative certification

The Alternative certification is subject to proper justification of the need to do so by Member States at MSC 83.

3.8 Chapter (8) Watchkeeping

- Watchkeeping is to include review of regulation VIII/1 on fitness for duty regulation to provide for proper maintenance of records of hours of rest and to harmonize this regulation with the provisions in the International Labour Organization (ILO) Maritime Labour Convention, 2006.

- Regulation VIII/2 on Watchkeeping arrangement and principles to be observed, with a view to updating the term radio operator to GMDSS operator.
- Introduction of mandatory alcohol limits during watchkeeping and other shipboard duties.

3.9 The STCW Code

The regulations contained in the Convention are supported by sections in the STCW Code. Generally speaking, the Convention contains basic requirements which are then enlarged upon and explained in the Code. Subsequently, the Code included the following consequential amendments:

- Sections A-II master and deck department and A-III engine department, to increase emphasis on enhanced navigation and, in particular, of the berth-to-berth requirements, and of modern developments for integrated bridge systems, including ECDIS; include training recommendations on bridge resources and engine room resource management; provide training on maritime legislation to assist in protecting the crew, owner/operators and ships from breaching the increasing legislative requirements; promote a "safety culture" to embrace all levels and further emphasis on management training, including enhanced knowledge of occupational health and safety issues; and increase emphasis on fatigue management.
- Requirements in Tables A-III/1 and A-III/2, relating to knowledge and demonstration of competence, to ensure that engineers have sufficient knowledge and competence in the operation, testing, fault diagnosis and maintenance of automation, electronic and electrical systems and equipment.
- Relevant requirements with a view to determining that the master should not be considered a watchkeeping officer when deciding the composition of the navigational watch.

- The need to develop a clear system by which not only the work schedule, but also actual hours worked, could be easily verified, to address concern over enforcement and a need for a consistent system for verification of actual hours worked or rest taken, which is practical and enforceable especially in the context of flag State and port State control.
- The need for the development of qualifications and training of seafarers operating pleasure yachts and commercially operated yachts, including the definition of a yacht in relation to a passenger ship.

In conjunction with the above mentioned issues a draft framework for determining minimum safe manning was approved in STW 40th session for inclusion in the draft revised resolution on principles of safe manning (resolution A.890(21)). The proposed draft framework, intended to assist Administrations and companies in determining minimum safe manning.

The Sub-Committee agreed in the same session that there was an urgent need to include appropriate provisions in STCW Convention to ensure that seafarers are properly educated and trained to face situations when their ship is under attack by pirates. In addition, draft guidance on the training and experience for personnel operating dynamic positioning systems was agreed in the intersessional meeting of the STW working group in September 2009 and included in Part B (recommendatory part).

4. Some Problem Areas of the Implementation of STCW

The Author believe that things will improve but still more to achieve, some important issues have to be clarified to ensure the proper implementation by all parties to the Convention. Perhaps, the use of vague phrases, such as “appropriate” opens the door for different interpretation of many issues. There must be no scope for different interpretation of the same matter, only then we will have a common platform from where we can move together to a better standard of training and certification.

4.1 Chapter 1 regulation I/10 “Recognition of Certificates”

There is no standard procedure in the Convention respecting the recognition of the certificates. It's almost 8 years of complying with the provisions of the Convention, the author believe, that is enough period for the member states to have standardized their MET systems, and all graduates from MET institutions shall have the same minimum standard of training and competency.

The verification process is important to ensure the validity of certificates; nevertheless many countries reexamine the candidates and ask them for additional training in order to issue an endorsement or certificate for them, as some countries applies higher than the requirements of STCW.

Aren't they all complying with the same provisions and applying the same minimum standard. As a matter of fact, the gap in competency and knowledge levels may be the result of difference in quality and level of preliminary education acceptable to join the MET institutions in different member States.

Amazingly, some member states allow candidate to join the maritime academies after 9 years of preliminary education, and others may require candidate with 12 years preliminary education, adding to this that the level of the preliminary education is not the same everywhere, that may result in a gap in the level of competence and the ability to gain knowledge.

Perhaps IMO have to set minimum education standard or pre request for the new entrants joining the MET institutions in order to narrow the gap in the level of competency and intellectual level of seafarers. Alternatively, the intellectual level of all candidates could be assessed, before they are allowed to join MET institutions.

4.2 Chapter 1 regulation I/11 “Revalidation of Certificates”

In paragraph 5 it is stated that for the purpose of updating the knowledge of officers the Administration shall ensure that the texts of recent changes in national and international

regulations concerning safety of life at sea and the protection of the marine environment are made available to ships entitled to fly its flag.

The Administration is not directly involved for the operation of the ships under its flag. The objectives could be conveniently achieved by introducing this requirement as a “company responsibility” under regulation I/14 (in addition to present reference in regulation I/11) to state that “Company shall ensure that necessary publications are supplied to the ship under its management so officers can update their knowledge in relation to latest changes and requirements in respect of safety and environmental protection”.

In paragraph 2 of section A-I/11 of the STCW Code specifies that the refresher and updating course shall include changes in relevant national and international regulations concerning the safety of life at sea and the protection of the marine environment and take account of any updating of the standard of competence concerned.

Conceivably, the refresher course should have been included in STCW Code’s four-column competency tables and a time frame should have been allocated for it, to avoid lengthy refresher courses, which takes up to 2 months in some member states, including the issuance of new certificates.

4.3 Additional problem areas of the implementation of STCW

There are a number of weaknesses in the implementation of STCW Convention; some unachieved objectives, as well as, shortcomings, which have to be considered in the future development of the Convention such as:

The Convention, since its initial adoption date, is focusing on the vocational education, by adopting the concept of introducing sufficient skills in relation to ship operations, neglecting the importance of other fields related to the building of academic knowledge, such knowledge may carry the same value as skills and competency standard in operating the ships.

STCW Convention provides minimum standard of competency, which have to be integrated among other standards to produce the likely competent and knowledgeable seafarer, who can interact with other stakeholders of the industry. Enriching the knowledge of seafarer to the level of high education will benefit the maritime industry. Most of today seafarers are likely to hold different positions in the industry in the future. Evaluation of compliance to the provisions of the Convention, is entirely based on the information submitted by each party, no physical verification is made by the organization to confirm the integrity of such information.

The STCW Convention specified the approved performance standards governing the use of simulators in training and assessment which the member States are obliged to comply with, the Convention did not specify in details the technical specifications of the approved type simulator or the qualification of instructors and assessors involved in the simulator training and assessing as required by the Convention.

From a practical point of view, onboard training is creating additional load on the ship's officers, which may fail to achieve the likely standard of seagoing training to their trainees.

The Convention did not deal with the manning levels, IMO provisions in this area are covered by International Convention for the Safety of Life at Sea (SOLAS) Convention.

Conclusion

The question raises itself, is the ongoing revision of STCW Convention is comprehensive enough to solve all the existing problem areas and drawbacks in the present implementation of the Convention or it's just updating the curriculum to cope with the rapid technological advances in the shipping industry?

Yet, various shortcomings, unachieved objects and weaknesses in the implementation process, are not considered in the currently going revision of STCW Convention, which present the need of additional work and revision to the Convention, in order to achieve its objectives in ensuring the maritime safety and protect the environment by improving the global professional standard of the seafarers.

References

- Brady, P. (2008). Human resources biggest challenge for shipping, *Maritime global net*. Retrieved 31 October 2009 from the World Wide Web:
<http://www.mgn.com/news/dailystorydetails.cfm?storyid=8757>
- International Convention on Standards of Training, Certification and Watchkeeping for seafarers, 1978, as amended in 1995 and 1997 (STCW Convention), IMO, (2001).
- International Maritime Organization. (2009, February 23). *STW 40th session Report to the Maritime Safety Committee*: IMO.
- International Maritime Organization. (2008, March 28). *STW 39th session' Report to the Maritime Safety Committee*: IMO.
- International Maritime Organization. (2007, February 8). *STW 38th session Report to the Maritime Safety Committee*: IMO.
- International Maritime Organization. (2009, February 23). *STW 40th session Report to the Maritime Safety Committee*: IMO.