

# **“Mandate Minimum Shipboard Training berths”**

## **STCW proposed amendments and reforms in present approach – By Capt MM Saggi**

- 1. Mandate minimum shipboard training berths in STCW convention. Owners can be incentivized to provide the same by deducting a multiple of trainee accommodation volume from the Gross Tonnage of the vessel:** Shipboard training is a necessity to make the seafarers job-ready. It is also a STCW convention requirement. However, the availability of such slots is a big challenge. The way forward is to mandate shipboard training slots under the convention. This would also improve the supply of quality manpower to industry thus improving safety and environmental protection. With an adequate supply of trained and qualified seafarers, their wages and in turn cost of operating the ships can also be controlled better. It would also stop the poaching of trained manpower and create a more level playing field. A multiple of trainees’ accommodation volume can be deducted from the Gross tonnage of the vessel through suitable amendment in tonnage convention, thus reducing the Gross Tonnage of the vessel and consequently port and canal dues of the ship in perpetuity. This would incentivize ship owners to provide more shipboard training slots, which are otherwise seen as an added capital and recurring cost in ship operations.
- 2. Place officer trainees as ratings to overcome shipboard training slot challenge:** If there are insufficient shipboard training slots, after three to four months of exposure as officer trainees, deck cadets, and engine trainees can be placed on ships instead of ratings, with tacit understanding with ratings unions. Conversion of such ratings to officers is possible if they are trained like officer cadets under a structured shipboard training program.
- 3. Longer shipboard training for marine engineers:** 6 months of shipboard training for engine trainees is too short. This needs to be augmented to a minimum of 12 months.
- 4. More facilitative alternative certification regime:** Before the introduction of autonomous vessels, there is bound to be a gradual reduction of manning on board vessels. With an unmanned engine room and various control gadgets on the bridge, the requirement for dedicated deck or engine officers to meet the safe manning requirements would be dispensed with. Officers would be required to intervene only when there is a malfunction in an autonomous system. Officers holding dual certificates would be ideal for reducing manning without compromising the safety of the vessel.

Accordingly, there is a compelling need to make acquiring and progressing with dual or alternative certificates more facilitative to encourage more seafarers to opt for the same.

5. **Training Record Book (TRB) for shore training:** All structured shipboard training programs mandate TRB. Such TRB also needs to be mandated for approved shore-based training programs as well. This will help structure and harmonize acquiring the hands-on skills during pre-sea training. Such training records can also be used by assessors during exit examinations. Assessors can ask the candidates to demonstrate skills learned randomly from claimed acquired skills, as recorded in their TRB. This will keep the trainees and trainers imparting the hands-on skills on their toes.

6. **Mandatory training & experience of trainers and assessors and requisite tools:** Training and assessment need to be conducted by credible trainers and assessors. Ideally, they should have at least some hands-on experience in the subject being taught or assessed to make the competency training and assessment relevant and contemporary. Further, there can be mandatory structured training and various tools to continuously upgrade their skills. In addition, the trainers and assessors can be graded by students and peers to measure their performance, so that same can be improved upon. Modern tools of training and assessment also need to be provided to trainers and assessors to make the same realistic to their shipboard functions. Shipboard trainers also need to be imparted similar training and assessment-related skills and provided with similar tools.

7. **Structured shipboard training for operational-level officers:** In most training programs, we do have a requirement of structured shipboard training for cadets and junior engineers, before they are considered fit for operational-level duties on board. There are no such requirements when an operational-level officer is considered for promotion to the management level. Such structured training and TRB needs to be mandated under the convention to better prepare the officers to take on management-level responsibilities. Those trained under TRB can also be given some sea time remissions to incentivize them to follow structured training.

8. **Command course:** There is a compelling need for a mandatory command course before an officer is promoted to take over as master or Chief Engineer. The buck stops at the Master or Chief engineer in any crisis. An officer due for command needs to be trained assessed on board the ship and ashore and made competent to deal with all possible exigencies likely to be encountered at sea.

9. **Mental health-related treatment to be included in first aid courses:** In all existing first aid courses, seafarers are trained to handle issues related to visible injuries and illness. Mental health-related contingencies amongst seafarers are now a major concern. Identification and dealing with mental health-related concerns need to be included in first aid courses at all levels. Seafarers also need to be trained to identify when they may be impacted by such crises and encouraged to seek help, rather than keep the concern to themselves.

10. **Free access to IMO publications online:** This is not directly related to STCW but is certainly a related issue to improve the quality of training and certification. IMO publications are highly prized documents, be it online or in hard copies. Sale proceeds from IMO publications are used for part funding the technical cooperation for conducting IMO conventions-related training for seafarers from developing and undeveloped parts of the world. The key objective of IMO is safety security and environmental protection. These objectives and mitigation legislation are detailed in various publications of IMO. If the same are made available free online and made readily accessible to all stakeholders, IMO and its members are better placed to achieve the intended goals. However, IMO can continue to use the collection from the sale of hard copies to part fund the technical cooperation. The shortfall in technical cooperation funds can be made good by slightly higher contributions by member states and through enhanced donations.

11. **Member states like India and others similarly placed, can offer a large number of maritime trainers under IMO technical cooperation program:** Member states need to be more proactive in facilitating technical cooperation by offering the trainers to the rest of the world under technical cooperation. This is not directly related to STCW amendments but would certainly help improve the quality of training across the world. It would also attract better and younger seafarers to opt for the teaching profession as the trainer would get an opportunity to reach out to the whole world.

12. **Hands-on skills mandated for some of the shore training programs may be allowed to be imparted on board ships in certain circumstances:** For acquiring certain ship operations-related competencies, seafarers need to acquire hands-on skills, which are mainly obtained in workshops or in full mission simulators. For this, the physical presence of trainees and trainers is required in the right environment with appropriate equipment. When the same is not practical due to unforeseen circumstances eg Covid like crises, the same may be permitted to be imparted during shipboard training or using innovative digital training tools. Such flexibility needs to be built in the convention provisions.

13. **Underpinning knowledge and related contact teaching may be imparted in hybrid or online mode:** Certain aspects of competency-related training for acquiring underpinning knowledge on different aspects of ship operations and equipment are traditionally imparted in chalk and talk classrooms. This aspect of training and most parts of revalidation and upgradation training can easily be imparted in hybrid or online mode to have better reach and reduce the cost of training.
14. **Endorsement for vessels other than tankers:** STCW convention prescribes minimum standards of competency. Such training and assessment is generic in nature. Incidents on oil/ chemical and gas tankers can cause serious loss of life, loss of property and may result in major environmental damage. That is why tanker endorsements are mandated in the convention for different categories of tankers. There are major concerns wrt the operational safety of other categories of vessels as well because seafarers otherwise certified may not be competent to discharge specialized functions required to be performed on ships other than tankers. Hence it is recommended that tankers like endorsement i.e. minimum service, short shore training, and related simulator training followed by desired endorsement can be mandated in convention to safeguard operations of containers, bulk carriers, dredgers and offshore vessels etc.
15. **Digital locker for certificate and document for seafarers:** A soft copy of all relevant documents required to be carried by seafarers needs to be maintained in the digital database, maintained by the flag state, accessible to seafarers as well as to flag state and Port State for instant online verification purposes.
16. **Personal Safety and Social Responsibility (PSSR) course to include following:** Environment, Social Responsibility, Governance (ESG), gender inclusion & sensitivity and mental health etc. need to be included in PSSR course.
17. **More responsibility for companies to impart training and familiarise seafarers before placing them on board:** STCW prescribes only minimum standards. Over a period, new designs of vessels, equipment, and regulations are likely to be introduced. Requirements to perform shipboard operations competently may warrant that the gap in the training requirements needs to be identified and bridged. This can be facilitated by familiarisation training ashore and on board. Employers may be held accountable if gaps are identified during an ISM audit, PSC inspection, or post a casualty investigation report.
18. **Meeting of IMO convention obligations and related training:** National legislation needs to be amended in line with IMO mandate to give it teeth. Maritime

administration needs to consult all related Govt departments and other concerned agencies during various deliberations while developing of IMO instruments. However, once an IMO member state has acceded to promulgations of IMO, mandated obligations need to be complied with by all concerned, by incorporating the same in the statute of concerned agencies. Responsibility for compliance should not be limited to maritime administration alone. Where required suitable training for compliance with relevant provisions may be imparted to officials of departments related to the convention mandate. More often than not, agencies other than maritime administration are either not aware of such obligations or do not take the commitment given by the member state under conventions seriously. Restricting shore leave of seafarers by immigration, not creating shore reception facilities by ports, inadequate International Maritime Dangerous Goods (IMDG) code compliance by ports, wrong declaration of IMDG cargo by shippers /consignees, and lack of emergency response preparedness and place of refuge by coastal states are few such examples, which can be mentioned.

19. **Separate competency examination for Masters and Chief Engineer from Chief Mate or Class 2 competency exams:** Traditionally this was always so. However, while drafting STCW 95 amendments, it was felt by experts that the second in command should know everything that the Master or Chief Engineer knows. This was borrowed from aviation which requires that a co-pilot needs to be equally competent as the pilot. It was argued that if the Master or Chief Engineer is incapacitated at sea, the second in command should bring the vessel back to port safely. Member states played along and approved this line of thinking. However, in practice, over the centuries there has never been any reported incident when the vessel could not be brought ashore safely by no 2 in command in such circumstances. The challenge with the co-pilot approach is that a candidate after one year of sea service gets his Second Mates. After 18 months he/she appears for Mates. In other words, after 2.5 years of service he or she is expected to learn everything, a person in command needs to know. The examiners are also expected to assess and certify such officers for command, albeit after 18 months of further sea service. It is not a realistic expectation, either from examiners or from candidates. This approach has also resulted in longer post-sea training (6 months) and two examinations for chief officers and second engineers (phase 1 and phase 2). This has also severely restricted the flow of Chief Officers and Second Engineers to the industry, causing serious manning challenges at the management level. This needs to be reversed.

20. **Competency requirements to remain contemporary:** The STCW convention is amended after 15 to 20 years i.e. 1978 convention was amended in 1995 and then in 2010 and now probably in 2025. However, shipboard competency requirements change incrementally continuously. The time for training and assessment is limited. Hence dated requirements need to give way to contemporary needs. Also, those who are in

the system after passing their competency requirements need to be updated regularly. 5 yearly upgradation and revalidation is too long a gap. Hence a structured mechanism of continuous upgrading needs to be included in convention text to meet such compelling needs.

21. **Use assessment as a tool to achieve relevant competency for seafarers:**

Typically, the training institutes teach what is asked in the examination. Classic example is the stress on celestial navigation in the Mates examination in the Indian Certificate of Competency (COC). Since the pass marks are also high, this shifts the whole focus of trainees as well institutes on navigation rather than stress on cargo work, which is the core function of the Chief Officer. Hence, it is essential to ensure that due weightage is given to core contemporary competency-related topics and relevant questions are asked in written and oral examinations so that trainers impart relevant training and seafarers passing the competency exams are fit for the job.

22. **Application of acquired knowledge in a real shipboard environment is the key to achieving competency:**

Questions in written and oral assessment mostly ask the candidates to explain or describe. Answers to such questions mainly expect candidates to reproduce the theory. What is more relevant is to achieve competency is the application of acquired under pinning knowledge. Hence the questions need to be tweaked to pose real-life problem solving and decision making required on ship. Questions should force the students to apply their mind, think standing on their feet, and answer the questions.

23. **Fundamentals of convention and shipboard practices need to be imparted in training institutes and tested in assessment:**

Load line convention is nothing but assigning reserve buoyancy (freeboard) to a ship. The higher the risk of sinking, more is the reserve buoyancy. Hence in winter North Atlantic, where the weather is very bad, maximum freeboard is assigned i.e. the ship can load the least. Similarly, a ship having more compartments is less likely to sink as compared ship with a lesser number of compartments. Hence tankers are permitted lesser reserve buoyancy or freeboard and can load more as compared to similar size dry cargo ships. Rather than stressing on details of the text, the genesis of the convention needs to be explained so that comprehension is easier, and knowledge remains with students forever. Also, the application of knowledge on board becomes easier. Another example of imparting the basics of the convention is a limitation of liability convention, which limits the third-party liability of a ship owner. It is essential for the ship owner to insure his liabilities so that in case of any untoward incident, the insurance company covers the liability and business goes on. This is possible only if the liability is limited. If the liability is unlimited then such liability cannot be insured. Further larger the ship, more the damage it can

cause and hence larger the liability limit. This is OK as large ships also earn more. In addition, over a period of time, due to inflation, costs related to mitigating the liabilities eg clean up and Wreck removal etc do go up and hence limits mentioned in the convention need to be revised periodically. Hence seafarers need to understand the underpinning reason behind each convention, code, resolution, performance standard, and Govt order. Once the same is understood, it will never be forgotten.

24. **Imparting knowledge through case studies:** Rather than just telling what to do and what not to do, it's more useful if case studies related to various incidents covering all aspects of competency are shared in the classroom. The same can be discussed in detail with seafarers. The consequences, such as loss of life, injuries, pollution, damage, delays, suspension and cancellation of certificates, criminal liabilities, loss of reputation, etc all need to be discussed and debated threadbare in the classroom so that seafarers are conveyed a clear impactful message regarding the importance of not only knowing their job but also being alert at all time and doing it well, failing which the consequences can be serious.

25. **Implementing proposed reforms:** Some of the proposed reforms can be implemented only through the amendments in STCW convention provisions, whereas others can be initiated by member states themselves. In any case, nothing stops a member state from going beyond convention requirements, if minimum prescribed convention provisions are met. There may be added costs for such enhanced requirements to the member state and ships under its flag. However, the dividends in terms of larger trained quality manpower, more employment opportunities for member state seafarers, safer ships, better environment protection, fewer port state detentions, and consequently much larger share of ships under its flag and a bigger share in the global supply of seafarers, far outweigh the incurred costs.