

Chapter 3

Aligning Philippine seafarer education with EMSA directives: an approach to elevating global and local maritime standards

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Abstract

This chapter outlines the measures and progress of the Philippine maritime administration toward conformity with international standards, focusing on the impact of the audits conducted by the European Maritime Safety Agency (EMSA). In recent years, the European Union (EU), which is home to many shipping nations, has stepped up its effort to improve the safety and efficiency of global shipping by promoting compliance with international standards for seafarer training through EMSA, in its capacity as a major shipping nation. Through this initiative, the question of whether the seafarer training systems of major seafarer providing countries, including the Philippines which became the world's largest supplier of seafarers in 2021, are compliant with international standards has emerged as an issue of critical importance to the European shipping industry. The results of eight EMSA audits conducted on the Philippines over the past fourteen years had the potential to significantly affect the credibility and international reputation of the Philippine maritime industry and, if not properly addressed, risked the loss of opportunities for Filipino seafarers to embark on EU flagged vessels. In light of the above situation, this chapter details the actions taken by the Philippine maritime authorities in response to the EMSA audit findings, as well as the need for further action to bring the Philippine maritime industry into compliance with international standards.

Keywords: the Philippines, European Maritime Safety Agency (EMSA), STCW Convention, Maritime Industry Authority (MARINA), Certified STCW seafarers

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I. Introduction

As the backbone of global trade and logistics, the global shipping industry plays an important role in the international economy. With more than 80% of world trade by sea, maritime transport is vital to the smooth functioning of international markets and global supply chains.² The industry encompasses a wide range of activities including shipping, ports, maritime services and shipbuilding, and makes a significant contribution to the global economy. Seafarers are at the heart of the sector and are responsible for the operation of ships that carry goods across the world's oceans. Seafarers perform a variety of tasks, including navigation, engineering, cargo handling, and maintenance, and are an integral part of the execution of maritime operations. The safety, efficiency, and sustainability of maritime operations depend heavily on the skills, training, and well-being of seafarers. Seafarers' work is often demanding and performed under difficult conditions, highlighting the importance of quality education and training and the need for robust international standards and regulations to ensure the safety and rights of seafarers. The importance of seafarers is not limited to the maritime industry, but also affects the global economy, environmental protection and international security. Seafarers play an important role in facilitating international trade, supporting economic development and promoting connectivity between nations. Seafarers also contribute to the safety of shipping routes and the protection of the marine environment, making them vital to the sustainable future of the global maritime industry.

High-quality maritime education and training (hereinafter referred to as MET) are crucial for ensuring the safety and efficiency of maritime operations, as they equip seafarers with essential skills and knowledge for safe and efficient vessel operation, including navigation, engineering, and emergency response. Such education ensures compliance with international standards like the Standards of Training, Certification, and Watchkeeping (hereinafter referred to as STCW) Convention, promoting uniform seafarer competencies crucial for preventing maritime accidents. Additionally, it fosters a culture of safety and environmental responsibility, essential for sustainable operations, by emphasizing best practices in pollution prevention and waste management. Training programs also keep seafarers abreast of technological advancements in navigation systems, automation, and ship construction, enhancing operational efficiency and safety. Moreover, preparing seafarers for

² Please refer to the website at <https://unctad.org/news/united-nations-bodies-call-further-action-end-seafarer-crisis> accessed on 28 November 2023.

emergency situations enhances their technical, leadership, and teamwork skills, significantly reducing risks during maritime emergencies. Investing in quality education and training not only offers career development opportunities, making the profession more attractive and addressing the global shortage of skilled maritime personnel but also ensures a steady supply of competent seafarers to meet the industry's growing demands. In essence, high-quality MET underpin the safety, efficiency, and sustainability of maritime operations, ensuring seafarers are well-prepared for their roles, comply with international standards, protect the environment, and adapt to technological changes, supporting the global maritime industry's overall health and prosperity. In the fiercely competitive global seafaring labor market, the goal is for Filipino seafarers not only to maintain their competitiveness but also to continue being preferred candidates for major maritime advanced nations.

This paper begins with an overview of the seafarer education and training system in the Philippines, examining how the demand for high-quality seafarers compliant with the STCW Convention is on the rise. It then transitions to the global maritime industry, which, as an indispensable backbone of international trade, has seen its importance grow even further in the wake of the global pandemic. Seafarers, responsible for operating vessels that carry eighty percent of the world's logistics, have become essential for the seamless execution of maritime operations. Given the crucial role seafarers play in underpinning the global economy, the quality of their education and training can be seen as a fundamental pillar in ensuring the safety, efficiency, and sustainability of maritime operations. High-quality maritime education is essential not only for seafarers to efficiently perform their duties but also for instilling a culture of safety and environmental awareness that is vitally important for the future of the maritime industry. In this regard, the role of the European Maritime Safety Agency (hereinafter referred to as EMSA) is significant. Historically, major European shipping nations such as the United Kingdom, Norway, Belgium, Germany, Greece, and Italy have achieved economic development. Consequently, enhancing maritime safety, preventing pollution from ships, and improving maritime security have become essential challenges for EU member states. EMSA was established to achieve these objectives and has evolved into a crucial institution setting benchmarks and directives for MET standards globally. The EMSA's guidelines and audits are instrumental in shaping the policies and practices of maritime education institutions worldwide, ensuring that training programs are comprehensive and adhere to the latest safety and operational standards.

Against this backdrop, aligning the seafarer education in the Philippines with EMSA's directives has become an urgent strategic imperative for the country as a seafarer-supplying nation. Especially as the world's largest supplier of seafarers (BIMCO 2021), the Philippines deeply recognizes the importance of responding to EMSA audits. Over the years, the Philippines has endeavored to develop a high-standard MET system, recognizing that aligning its maritime training program with EMSA's directives is not merely a regulatory requirement but a strategic choice to enhance the quality of Filipino seafarers. This is aimed at not only meeting the significant role Filipino seafarers play in the global maritime workforce but also at examining how aligning Philippine seafarer education with EMSA recommendations has impacted the standard of maritime training domestically and internationally. By adhering to comprehensive safety and education standards based on EMSA's recommendations, the Philippines has had the opportunity to strengthen its maritime training framework, thereby ensuring seafarers are adequately prepared and capable of meeting the challenges of modern maritime operations. Collaboration based on EMSA's response has the potential not only to contribute to the global challenge of safer and more efficient maritime operations but also to significantly enhance the employability and competitiveness of Filipino seafarers on the international stage. With these challenges in mind, the paper attempts to elucidate how the Philippine government has integrated global standards into its local maritime administrative framework.

II. Filipino seafarers in the global maritime workforce

A. The role of Filipino seafarers in the global maritime sector

The Filipino seafaring workforce are deeply rooted in the Philippines' geographical and cultural heritage. As an archipelagic nation composed of over 7,000 islands, the Philippines has a long-standing maritime tradition that dates back centuries. This tradition has evolved over time, with the Filipino seafaring workforce becoming a cornerstone of the global maritime industry. The origins of Filipino seafaring can be traced to the pre-colonial period when indigenous peoples engaged in trade and communication across the islands using balangays, large wooden boats (Mercene 2007). These early maritime activities laid the foundation for the Philippines' rich seafaring culture. The arrival of Spanish colonizers in the 16th century further integrated the Philippines into global maritime routes, exposing Filipino seafarers to international trade and navigation (Fajardo 2011). In the modern era, the

significance of the Filipino seafaring workforce has been magnified by the demands of global trade and the shipping industry. The Philippines has emerged as the leading supplier of maritime labor worldwide, a status attributed to the high level of English proficiency among Filipinos, competitive training and education standards, and a strong work ethic (Baumler, Bhatia and Kitada 2021). Filipino seafarers are renowned for their skills, reliability, and adaptability, making them preferred candidates for various roles on merchant ships, including officers, engineers, and deck and engine crew. The contribution of Filipino seafarers to the global maritime industry is not only economic but also socio-cultural (Pigafetta 2011). Moreover, the seafaring profession has fostered a sense of pride and national identity among Filipinos, highlighting their indispensable role in international maritime operations.

Table 3.1 Number of processed and deployed Filipino seafarers

Year	Processed seafarers	Deployed seafarers
2019	561,803	505,759
2020	351,531	270,022
2021	434,961	394,984
2022	546,498	492,494
2023	620,756	578,626
Grand Total	2,515,549	2,241,885

Source: Interview at ITF Manila

The data compiled by the Philippine Department of Migrant Workers (hereinafter referred to as DMW) reflect the trends in Filipino seafarers' international deployment. The drop in registered and deployed seafarers in 2020 was due to the COVID-19 pandemic, which disrupted global operations. However, demand for Filipino seafarers increased post-2021 due to geopolitical tensions and the restructuring of the DMW, which likely aided recovery. Analyzing the Filipino seafarer labor force offers insight into global labor market dynamics, migration, and socioeconomic development in maritime nations. Quality maritime education and training are essential to the safety, efficiency, and sustainability of maritime operations globally. The Philippine seafarer community's resilience and adaptability to technological changes and regulatory shifts underscore the critical role of human capital in the maritime industry (Carpenter, 2016). The enduring legacy and importance of Filipino seafarers reflect the country's journey from its ancient maritime traditions to its current role in international maritime affairs.

Table 3.2 Valid Licensed officers as of December 2022

Rank	Total
Masters	28,020
Chief mate	6,055
Officer in charge of a navigational watch	57,631
Chief engineer	25,495
Second engineer	3,692
Officer in charge of engineering watch	40,540
Electro technical officer	8,052
Grand total	169,485

Source: Interview at ITF Manila

In the Philippine maritime sector, valid licenses are issued to professionals who have fulfilled the requisite educational and licensing criteria, enabling them to lawfully operate on maritime vessels. These individuals are pivotal in upholding the safety, operational efficiency, and adherence to regulatory standards within maritime operations, with their credentials receiving recognition on both a national and international scale. Candidates aspiring to become seafarers embark on a comprehensive educational journey, encompassing theoretical coursework, practical training, and hands-on shipboard experience at accredited seafarer training institutes. This curriculum is meticulously structured to impart essential knowledge and skills in various maritime disciplines, including navigation, engineering, and safety protocols. Upon completing their training, aspirants are required to demonstrate their proficiency through rigorous certification examinations, encompassing a broad spectrum of maritime operations such as navigation, cargo management, ship safety, and emergency response protocols. The issuance of licenses is administered by the Philippines' Maritime Industry Authority (hereinafter referred to as MARINA), the authoritative body governing the nation's maritime industry. These licenses serve as a testament to the individual's fulfillment of the stringent criteria regarding training, competency, and experiential prerequisites essential for their designated responsibilities aboard ships. Licensed maritime professionals are obligated to adhere to the international norms, notably the STCW, as stipulated by the International Maritime Organization (hereinafter referred to as IMO). Moreover, they are mandated to engage in ongoing educational and professional development endeavors to stay abreast of the latest developments in maritime safety protocols and

technological innovations. The global maritime industry exhibits a robust demand for Filipino maritime professionals, whose qualifications are globally esteemed. The Philippine maritime industry's licensed officers epitomize the highest standards of professionalism and expertise. Their extensive training, commitment to upholding international standards, and dedication to ensuring safety and operational efficiency significantly contribute to the Philippines' esteemed status as a prominent provider of maritime professionals.

The MET framework in the Philippines stands as a vital pillar supporting the nation's substantial role in the international maritime labor market. Given its expansive archipelago, the Philippines has a deep-rooted maritime heritage, emphasizing the importance of the sea throughout its history. This tradition is reflected in its structured maritime education system, which comprises specialized schools and programs that align with the standards of the IMO. These educational entities offer a variety of courses aimed at equipping seafarers for a broad spectrum of maritime roles, such as navigation, engineering, and ship management, under the supervision of the Philippine government to ensure adherence to both local and international norms. This commitment is critical for upholding the high caliber of the MET in the country.

The EMSA plays a pivotal role in the formulation and implementation of standards pertaining to maritime safety and education. Established by the European Union, the primary mission of EMSA is to promote a high and consistent level of maritime safety and environmental protection across the EU. Over time, the scope of EMSA's influence has extended beyond the European Union, affecting maritime standards on a global scale. The agency undertakes a variety of activities, including the execution of inspections, provision of technical assistance, and formulation of guidelines that have a wide-reaching impact on maritime training institutions across the globe. Through its directives, EMSA is dedicated to improving the quality of maritime education, thereby ensuring that seafarers are adequately equipped to navigate the complexities of contemporary maritime operations, which encompass issues of safety, security, and environmental stewardship. The EMSA's contributions to the elevation of global maritime education standards is profound. Its rigorous audits and comprehensive reports on the state of maritime education in both member and non-member nations have catalyzed substantial enhancements in training programs, aligning them with international benchmarks. For nations such as the Philippines, where the maritime sector is a crucial economic pillar and a significant source of employment, adherence to EMSA's directives transcends mere regulatory compliance. It represents a strategic imperative aimed

at ensuring the enduring success and global competitiveness of its maritime workforce. This commitment to alignment with EMSA standards necessitates a continuous process of evaluation and improvement of the Philippine MET ecosystem. Such efforts are essential to not only meet but surpass the criteria established by EMSA, thus safeguarding the prospects of Filipino seafarers in the international maritime arena.

B. The Philippine Maritime Education and Training System (MET)

The MET System of the Philippines is a comprehensive framework for developing a workforce for the global maritime industry. The system is critically positioned within the larger context of the Philippines' contribution to the global maritime workforce by leveraging its vast archipelagic geography and deeply rooted maritime traditions to develop competitive, highly skilled maritime professionals. As of December 2022, the number of accredited maritime institutions by the MARINA are as follows: there are 83 maritime higher education institutions; 85 maritime training institutions; and 32 assessment centers.² These institutions specialize in education, training, and certification.³ The Philippine MET system is supported by a network of maritime professional institutions, including public and private academies, which provide education and training in line with international standards. These institutions are regulated by the Commission on Higher Education called CHED and the MARINA, which ensure that curricula and training programs comply with the standards set by the IMO, particularly the provisions of the STCW Convention. The curriculum in the Philippine MET system is designed to cover a wide range of knowledge areas and practical skills essential to the maritime profession. The curriculum includes nautical science, marine engineering, ship management, maritime law, environmental protection, and safety procedures (Baylon and Santos 2011). The system emphasizes hands-on training and experience at sea, allowing cadets to apply theoretical knowledge to real-world scenarios. Graduates undergo a rigorous screening process and receive an internationally recognized certification.

³ Interviews at ITF Manila held on 22 January 2024.

Table 3.3 Percentage of officers from five selected seafarer supply countries holding STCW certification (Chapter V/1)

STCW Regulation (Advanced cargo endorsements)	Philippines	Russian Federation	China	India	Ukraine
Officers holding Regulation V/1-1 (Certificate/endorsement in advanced training for oil tanker cargo operations)	27.9%	26.6%	28.6%	28.4%	10.5%
Officers holding Regulation V/1-1 (Certificate/endorsement in advanced training for chemical tanker cargo operations)	20.1%	12.2%	8.1%	14.1%	7.8%
Officers holding Regulation V/1-2 (Certificate/endorsement in advanced training for liquefied gas tanker cargo operations)	6.5%	3.0%	2.2%	6.7%	4.8%

Source: BIMCO (2021)

Filipino seafarers are a key part of the global maritime workforce and have always been part of the most important labour pool in the shipping industry. Filipino seafarers are highly regarded by international shipping companies for their unwavering dedication, operational efficiency and technical excellence. The Philippines is an extremely important source of manpower for the world merchant fleet. Filipino seafarers have demonstrated their versatility and adaptability by operating a diverse range of vessels, from huge bulk carriers and complex tankers to luxury cruise ships.

The sustained demand for maritime professionals in the Philippines underlines the critical importance of not only adhering to, but also exceeding, the established International Maritime Education and Training standards. Maintaining this competitiveness is key to ensuring the continued success and employability of Filipino seafarers in the global maritime sector.

Table 3.4 Types of vessels with Filipino seafarers on board

		2021	2022	Change
1	Passenger	72,813	101,109	38.86%
2	Bulk carrier	84,225	90,654	7.63%
3	Container	37,104	37,116	0.03%
4	Oil/prod tanker	28,310	29,247	3.31%
5	Chemical tanker	21,726	21,842	0.53%
6	General cargo	13,527	15,023	11.06%
7	Tanker	15,420	14,508	-5.91%
8	Gas tanker	9,451	9,462	0.12%
9	Pure car carrier	9,322	8,876	-4.78%
10	LNG	7,576	7,875	3.95%

Source: Interview at ITF Manila

The global shipping industry depends on having seafarers certified by the STCW Convention. The STCW certification ensures that seafarers have completed intensive and standardized training that is essential for the safe performance of maritime operations. This consistency plays a crucial role in reducing maritime accidents, which can have serious environmental and economic consequences. Such certified professionals are skilled in emergency response and can effectively manage incidents such as fires, wrecks, and oil spills to protect lives, cargo, and marine habitats. In addition, STCW-certified professionals are proficient in navigation, engineering, and other essential maritime technologies to ensure optimal vessel performance. With the increasing reliance on advanced technology in the maritime field, the STCW curriculum includes advanced training in the latest navigational and operational techniques to enhance the efficiency and performance of ships. The international recognition of STCW qualifications allows seafarers to pursue their careers on a global scale and meet the international demand for skilled maritime professionals. Maritime companies need STCW-compliant staff to comply with global safety and environmental standards, which is crucial for legitimate operations and to avoid sanctions or detention by port authorities. Moreover, the STCW framework assures shipping companies and regulatory agencies that seafarers comply with high quality standards, enhancing the safety culture and overall reputation of the maritime industry. Certified seafarers also play a pivotal role in mitigating operational risk and have a significant impact on shipping companies' insurance

costs and liability considerations. As the maritime industry evolves with technological advances, environmental regulations, and changes in international trade, STCW certified seafarers could adapt to these changes, ensuring a resilient and progressive outlook for the industry. The STCW training syllabus focuses on sustainability and emphasizes environmental stewardship, training seafarers to contribute to environmentally friendly maritime operations. The demand for STCW-qualified seafarers is driven by an essential need for a skilled, competent, uniformly trained workforce, which is essential to maintaining strict safety standards, operational efficiency, and regulatory compliance in the global maritime domain. The continued evolution of the maritime industry underscores the importance of a qualified workforce and the essential role STCW plays in shaping the future of the maritime profession.

Subsequently, the quality and competitiveness of the Philippine MET system is maintained through regular audits and evaluations by both local regulatory agencies and international organizations such as the EMSA. These assessments ensure that the education and training provided meets the evolving requirements of the maritime industry and complies with international safety and operational standards. The continuous improvement of the MET system and its adaptation to global best practices have positioned the Philippines as a leading global supplier of maritime professionals. Furthermore, Filipino seafarers who benefit from a robust MET system are highly sought after in the global maritime labor market due to their professionalism, efficiency, and proficiency. However, the success of the system is not without challenges. It faces the ongoing challenge of adapting to technological advances, regulatory changes, and a growing emphasis on environmental sustainability in the maritime sector. In addition, the system must also address issues relating to the welfare and rights of seafarers and ensure that they are adequately prepared and supported for the harsh conditions of seafarers' lives (Baumler, Bhatia and Kitada 2021). The MET system in the Philippines is a vital component of the country's maritime sector, reflecting the country's commitment to excellence in preparing seafarers for service in the global maritime industry. Through its rigorous curriculum, adherence to international standards, and focus on continuous improvement, the system not only contributes significantly to the global supply of maritime professionals, but also enhances the Philippines' reputation as a leader. As the maritime industry continues to evolve,

it goes without saying that the Philippine maritime education and training system plays an important role in shaping the future of maritime operations worldwide.

C. The seafarer training and competence

The Philippines is a country with an outstanding maritime heritage, and the importance of seafarer training and competence is critical to its substantial contribution to the global maritime workforce. As a major supplier of skilled seafarers to the international maritime sector, the Philippines relies on a rigorous training and certification system to maintain the proficiency, safety, and competitiveness of its maritime professionals. It is indisputable that the training and competence of seafarers plays a crucial role in the international maritime industry. The safety, operational efficiency and environmental sustainability of maritime activities depend on the competence, knowledge and expertise of seafarers. At the heart of maritime safety is the competence of seafarers. Rigorous seafarer training is paramount to developing seafarers capable of handling complex maritime operations such as navigation, cargo management, engine room functions, and emergency procedures. Skilled seafarers play a key role in avoiding accidents and mitigating the effects of unforeseen events. The STCW sets international standards for the training and certification of seafarers and establishes uniform standards of competence essential for safety at sea. Firstly, operational efficiency in the maritime domain is directly affected by the proficiency of seafarers. Properly trained seafarers can improve ship operations, from navigation and fuel efficiency to maintenance and cargo handling. Such operational efficiency not only enhances the profitability of shipping operations, but also strengthens the reliability and timeliness of the global supply chain (Dimitrova and Blanpain, 2010). In an industry where timeliness is critical, competent seafarers are invaluable in maintaining schedules and minimizing operational delays. Next, navigating the complex regulatory framework of the maritime industry requires seafarers who are familiar not only with operational practices, but also with international maritime regulations. Seafarers need to have a deep understanding of the laws and conventions governing safety, security and environmental protection. Familiarity with such regulations will ensure compliance with international norms set by the IMO and others and can enhance the reputation of shipping companies and flag states. As the global economy relies on seamless and safe maritime transport, the importance of seafarer competence has become especially prominent in recent years, as the rise of automated vessels

has become a booming trend. The development and ongoing training of seafarers is not simply a matter for individual groups or organizations, but is of paramount importance to the global economy. A skilled and competent seafarer is essential to maintaining the momentum of international trade and, by extension, the global economy. The training and competence of seafarers forms the basis for the success and sustainability of the maritime industry. Through thorough education and continued professional development, seafarers will be able to face the demands of modern maritime operations and ensure safety, efficiency and regulatory compliance. Investment in seafarer training and competence goes beyond the confines of a single vessel or company and is a global imperative that supports the safety of maritime navigation, the preservation of the marine environment, and the integrity of the global trade network. As the maritime sector continues to evolve, an unwavering commitment to seafarer training and capacity building has the potential to be a key element in addressing future challenges and seizing opportunities.

III. EMSA recommendations and Philippine training standards

A. The European Maritime Safety Agency (EMSA)

The EMSA established within the framework of the EU, is the basic agency responsible for promoting maritime safety, preventing pollution and strengthening maritime security throughout the EU. EMSA's mission is to enhance the overall safety and security of maritime transport, reduce the likelihood of maritime accidents, improve the environmental performance of maritime operations, and assist Member States in the effective implementation of EU legislation. to harmonize maritime safety standards across the EU and to ensure uniformity and compliance with the highest levels of safety and environmental management. In line with its mission, EMSA carries out a wide range of functions and activities. These include the monitoring and enforcement of EU maritime law, overseeing the application of EU maritime law by Member States and providing critical technical and scientific assistance to ensure compliance. This includes conducting inspections and visits and providing training and capacity building initiatives. In addition, EMSA manages pollution response services and coordinates responses to oil and chemical spills in European waters through a network of oil recovery standby vessels strategically located throughout the EU to enable rapid response actions. In addition, EMSA is involved in the collection, processing, and dissemination of maritime data essential to the operational needs of the EU

and its Member States. The impact of EMSA's activities has not been limited to the EU, but has affected maritime activities worldwide by setting high standards for maritime safety and environmental protection (Miler and Zielinski, 2008). In particular, EMSA's pollution response activities have gained international recognition and established it as a leader in marine environmental protection. Furthermore, EMSA's contribution to the harmonization of safety standards at sea has played a pivotal role in international maritime regulatory discussions, often influencing the formation of global safety and environmental policies. The European Maritime Safety Agency is therefore a cornerstone of the European Union's dedication to maritime safety, security, and environmental protection; EMSA's extensive activities contribute significantly to reducing risks associated with maritime transport, promoting environmental sustainability in maritime operations, and facilitating harmonization of maritime safety standards within the EU and globally. The EMSA's work is also contributing to the harmonization of maritime safety standards within the EU and globally. As the maritime sector advances in the face of new technological and environmental challenges, EMSA's continued involvement will be essential in shaping the future landscape of maritime safety and sustainability.

B. EMSA's Audit toward Philippine Seafarers

One of the main considerations here is the extent to which the EMSA Recommendations and the Philippine Training Standards are consistent with international conventions and standards, particularly the Standards for the STCW Convention. They are expected to be strictly reflective. requirements outlined in the STCW Convention. On the other hand, Philippine training standards will be evaluated based on compliance with STCW provisions and the ability to meet the competence and proficiency requirements outlined in the Convention. By comparing the two standards against the backdrop of international norms and expectations, this section examines the extent to which the Philippine training standards address the EMSA recommendations in terms of regulatory consistency, comprehensiveness, and effectiveness in ensuring the competence and professionalism of seafarers. Another aspect relates to the emphasis on a competency-based approach to training in the EMSA Recommendations and the Philippine Training Standards; the EMSA Recommendations advocate the adoption of a competency-based approach to seafarer training that focuses on the acquisition and demonstration of essential specific competencies. for safe and efficient

maritime operations. In contrast, Philippine training standards are scrutinized to assess the extent to which they incorporate competency-based methods, integrate practical training elements, and adhere to the principles of outcomes-based education.

Table 3.5 EMSA visits in the Philippines

Visit number	Date of audit
1st	6-8 March 2006
2nd	12-23 April 2010 – STCW Convention/Manila amendments
3rd	8-14 March 2012
4th	16-19 April 2013
5th	8-24 October 2013
6th	29 September to 3 October 2013
7th	13-23 March 2017
8th	24 February to 13 March 2020

Source: Interview at ITF Manila

EMSA recommends integrating simulators, e-learning platforms, and technological tools into training programs to enhance training effectiveness, realism, and efficiency. These tools provide immersive, interactive, scenario-based learning experiences that allow seafarers to practice critical skills, procedures, and decision-making in a simulated maritime environment. Philippine maritime training institutions are actively engaged in using technical tools and simulators in their training programs. However, there is a strong need to assess the availability and accessibility of these resources and evaluate the integration of technology-based training solutions into curricula. For smaller maritime training institutions, however, the financial burden of keeping up with the latest technological tools and simulators is significant. Given the continuous development of maritime education and training institutions in the Philippines, keeping up with new equipment in a rapidly evolving maritime industry, including automated ships, is challenging. Continuing professional development for seafarers is also costly. Once onshore, seafarers need to undergo refresher courses, specialized training programs, and skill upgrades to keep up with new technologies, regulatory changes, and industry trends. These refresher courses should be considered when assessing the level of training in the Philippines. The extent to which seafarers' continuing professional

development is supported may also be a concern for shipping companies and seafarers' unions.

IV. Philippine response

A. The role of the Maritime Industry Authority (MARINA)

The MARINA plays a pivotal role in the Philippine maritime sector, responsible for the comprehensive integration, development, promotion, and regulatory oversight of the industry. Established by Presidential Decree No. 474 in 1974, the agency's broad mandate encompasses promoting the development of the maritime industry and ensuring its long-term sustainability. This mandate is crucial for the industry's development, highlighting its significance both domestically and internationally. First, the MARINA is fundamental to the governance and strengthening of the Philippine maritime sector. The agency implements a wide range of policies, regulations, and initiatives essential for the development of shipping, shipbuilding, ship repair, and maritime professionals. The MARINA is committed to upholding excellent standards in maritime safety, environmental protection, and operational security, aligning its mission with national priorities and international maritime frameworks. Second, a key role of the MARINA is enforcing regulations in the maritime sector, which includes ship registration, seafarer licensing, and vessel inspection and certification, ensuring compliance with established safety, security, and environmental protocols. This role is critical in maintaining the Philippines' reputation as a reliable source of maritime labor and a flag state that meets international safety standards. The MARINA also plays a crucial role in harnessing the economic potential of the maritime industry, modernizing the shipping fleet to promote domestic shipping growth, and enhancing the efficiency and international competitiveness of the local industry. The agency's efforts in promoting shipbuilding and ship repair catalyze industrial expansion, generate employment, and foster technological advancement in this sector. Additionally, its oversight of Maritime Education and Training is essential to ensure the high caliber and international competitiveness of Filipino seafarers, renowned worldwide. By upholding rigorous training and certification standards, the MARINA plays a pivotal role in maintaining the high demand for Filipino seafarers, who contribute significantly to the national economy through remittances. Furthermore, the MARINA plays a crucial role in coordinating global standards and domestic frameworks, aligning the Philippine maritime sector with international norms. Compliance with

International Maritime Organization (IMO) directives, particularly the Standards of Training, Certification, and Watchkeeping (STCW), is vital for the global recognition of maritime certificates issued by the Philippines. The MARINA's contributions to global maritime safety, security, and environmental protection protocols ensure that the Philippines meets its international obligations, enhances operational safety, fosters sustainable maritime development, and enhances the market value of Filipino seafarers in the global labor market. As a cornerstone of the Philippine maritime framework, the MARINA embodies the country's commitment to fostering a strong, competitive, and environmentally responsible maritime industry. Through its extensive regulatory, developmental, and promotional activities, the MARINA plays an integral role in ensuring the safety, efficiency, and environmental sustainability of the maritime sector. This has significantly enhanced the country's economic welfare and solidified its position in the international maritime community.

B. Local implications of adapting training standards

The maritime industry is constantly evolving, driven by rapid technological advancements and changing global regulatory standards, which necessitates the continuous adaptation and enhancement of seafarer training standards. Aligning local training frameworks with international standards set by organizations such as the IMO is essential. Transitioning to these international benchmarks will require expanding the current educational infrastructure. Critical upgrades include integrating advanced simulation technology that mirrors the modern maritime environment, updating curricula to reflect the latest maritime safety standards and operational practices, and enhancing instructor qualifications to meet industry norms. Although these improvements are capital-intensive, they are crucial for developing a globally competitive and skilled seafarer workforce. Adherence to international training standards also requires a thorough review of the national regulatory frameworks overseeing maritime education and training. This alignment involves synchronizing national regulations with international standards, such as those outlined in the STCW Convention. Ensuring maritime training institutions meet these high standards may necessitate more rigorous accreditation protocols, consistent oversight, and regular quality assessments to maintain training excellence. Raising training standards will directly impact labor market dynamics in the maritime sector. Higher training standards could increase the employability of Filipino seafarers, making them more desirable to

shipping companies worldwide that prefer highly skilled and qualified seafarers. However, these enhancements could also increase entry barriers by imposing more comprehensive and costly training programs on prospective seafarers. These shifts in labor market dynamics must be managed carefully to ensure that the benefits of increased employability do not unintentionally create obstacles for aspiring seafarers. Adapting training standards has significant socioeconomic implications. Enhanced training quality can lead to better employment opportunities and higher wages for Filipino seafarers, potentially resulting in economic growth and a higher standard of living. However, the higher costs and training fees associated with improved education may limit accessibility, particularly for candidates from disadvantaged backgrounds. Therefore, maintaining equitable access to high-quality maritime education is of paramount importance. Aligning seafarer training standards with international norms is a multifaceted endeavor with wide-ranging implications for the MET ecosystem. While alignment promises to enhance global competitiveness, maritime safety, and operational efficiency, it also poses challenges regarding educational infrastructure, regulatory compliance, labor market balance, and socioeconomic inclusion. Effectively addressing these challenges requires an integrated and comprehensive strategy that involves stakeholders from government, industry, and academia to ensure the Philippines remains a leading supplier of highly qualified and skilled maritime professionals on the world stage.

Table 3.6 Status of remaining Philippine measures

	Completed
1	Revised PSG on Maritime Education Programs (MEP)
2	Revised PSG on Inspection and Evaluation of MEPs
3	Revised PSG on Monitoring of MEPs
4	Revised System of Accreditation of Assessment Centers (ACs)
5	Revised Quality Procedures and Forum for Accreditation of MTIs and ACs
6	Enhanced Practical Assessment Standard Scenarios
7	Updated Quality Standards Systems

	Ongoing	Target Completion	OPR
1	Development of sample detailed teaching syllabus and course assessment outcomes	Jun 2022	CHED & MARINA
2	Development of course packages (2 nd year and 3 rd year)	Aug 2022	CHED & MARINA
3	Evaluation of revised DTS submitted by MHEIs for 7 courses	Jul 2022	CHED & MARINA
4	Capacity building workshops	Oct 2022	MARINA & CHED
5	Institutionalization of the monitoring evaluation and inspection and learning	Jul 2022	MARINA
6	New MARINA organizational structure and staffing plan	2025	MARINA
7	Development of electronic Training Record Book (TRB)	Jun 2023	MARINA
8	Institutionalization of a national maritime admission exam	TBD based on TWG discussion	CHED & MARINA
9	Imposition of moratorium for the opening of new MEPS	Jul 2022	CHED
10	Automation of carrying capacity computation	Dec 2022	MARINA
11	Development of OBT portal in the MISMO system	Dec 2022	MARINA
12	Capacity building for instructors of MHEIs	Jul 2023	CHED

Source: MARINA, Marino World Forum online June 2022 presentation

In December 2021, EMSA initiated a comprehensive assessment of the training and certification infrastructure in the Philippines. The assessment issued a stark warning that Philippine-issued seafarer certificates would lose international recognition unless immediate remedial actions were taken to align with the STCW Convention's strict requirements. In response, efforts were made to establish a seafarer system that meets these obligations, emphasizing the enhancement of training and assessment protocols' monitoring, supervision, and evaluation mechanisms. On March 8, 2022, the Philippine government submitted a comprehensive response to the evaluation, demonstrating its commitment to correcting the identified shortcomings. The response outlined a multifaceted strategy implemented across six key areas: strengthening oversight, supervision, and evaluation mechanisms for training and assessment; improving competence review and assessment procedures; refining program

and course design and approval protocols; optimizing the availability and use of training facilities and simulators; enhancing in-flight training procedures; and streamlining processes related to the issuance, revalidation, and registration of certificates and endorsements. By 2023, the Philippines' concerted efforts had yielded tangible results, and EMSA's review confirmed significant progress in meeting STCW Convention standards. As a result, the EU approved the Philippine STCW system, recognizing the progress made toward compliance with international standards. However, the Commission's analysis highlighted areas where further improvements and enhancements are essential. The accompanying documentation emphasized the need for continued progress in the areas outlined in the annex. As this trajectory of progress unfolds, a steadfast commitment to continuous improvement is essential. Such unwavering dedication will not only ensure alignment with international benchmarks but also instill confidence in the efficacy of Philippine maritime training and certification institutions within the broader global seafarer community.

V. Concluding note

The shipping industry, which is responsible for more than 80% of world trade, is the cornerstone of the international economy facilitating seamless global markets and supply chains. The shipping industry encompasses a diverse range of activities, including shipping, ports, and shipbuilding, and has a significant impact on the global economy. Seafarers are at the heart of this industry, managing and operating ships and ensuring the safe and efficient transport of goods around the world. The role of seafarers, including their navigation and cargo handling skills, is critical to the safety, efficiency and sustainability of the maritime industry. In particular, enabling seafarers to operate ships safely and comply with international norms, such as the STCW Convention, is significant to preventing transboundary maritime accidents and promoting environmental protection. Mandatory training for seafarers not only enhances the safety and operational efficiency of maritime activities, but also helps maintain the international competitiveness of the maritime industry and strengthens the skilled workforce, including enabling it to respond to technology shifts and emergency situations. In this context, comprehensive training and certification to maintain proficiency and safety has been recognized as essential to maintaining the high standards required in the highly competitive international maritime sector. Seafarers who are properly trained against international standards can have a direct impact on safety and

efficiency at sea through their ability to seamlessly perform effective maritime tasks such as navigation, cargo handling, and emergency response. From the above, it seems clear that a steady commitment to training and upskilling seafarers is essential for the continued success and sustainability of the global maritime sector, while at the same time addressing the challenges and taking advantage of new opportunities arising from the unique nature of maritime labor.

EMSA, of which many of European major shipping nations are members, has conducted eight audits of the Philippine maritime administration so far since 2006. EMSA's audits have focused on the quality of maritime education, the rigor of the certification process, and the competence of seafarers, with the goal of ensuring that the Philippine maritime education and training system complies with STCW Convention standards. Specifically, the audits examined the content of the educational curriculum, the sufficiency of instructor qualifications and the effectiveness of training facilities and certification protocols. These audits also examined the extent to which the Philippine maritime sector is meeting the evolving demands of the global maritime industry. In order to respond adequately and promptly to these audit findings by EMSA, the Philippine government through the administrations of Arroyo, Aquino III, Duterte, and now Marcos Jr. has been working to promote maritime administrative reform and improve training content, methods and evaluation procedures in Philippine seafarer training institutions to ensure that training is comprehensive, current, and consistent with international standards. This has resulted in the modernization of maritime administration in educational strategies and methods, the introduction of new technologies and the improvement of the overall quality and relevance of seafarer education in the Philippines. However, it is also true that seafarer education institutions in Luzon, Visayas, and Mindanao regions face a number of challenges in daring to implement measures in response to the EMSA recommendations, including financial constraints, lack of infrastructure, and shortage of qualified educators and assessors. The cost of adopting new educational techniques, standards, and technologies in line with the outcomes of the recommendations is an excessive burden for them and complicates the implementation process. Seafarer training institutions in the Philippines are in an environment where they have to be aware of their international competitiveness and strive to meet global standards while utilizing appropriate organizational capacity within various constraints and limitations. Through their investments in faculty capacity building, digital

tools, online learning platforms, and the integration of simulation technology, seafarer training institutions are working tirelessly to provide quality training that complies with EMSA guidelines. Meanwhile, as collaborators in this field, major developed shipping countries, including Japan, are also contributing to improving the quality of seafarer training through the exchange of expertise and financial support for seafarer cadets. Going forward, the Philippine Government would remain committed to maintaining its international competitiveness by implementing strategic initiatives and administrative reforms in the maritime sector. These reforms are aimed at expanding opportunities and fostering strong partnerships with leading maritime nations. While a myriad of challenges lies ahead, the Philippines is expected to strategically utilize available opportunities to further strengthen the development of its maritime workforce and ensure a stable and sustainable supply of highly skilled seafarers.

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