

## Chapter 3

### Filipino Seafarers in the Global Labor Market: Compliance and Quality Standards

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#### Abstract:

The purpose of this chapter is to outline the important role played by Filipino seafarers in the global seafarer labor market. The Philippines has long been recognized as one of the world's largest suppliers of seafarers, and Filipino seafarers make up a significant proportion of the global seafarer workforce. Despite the significant contribution that Filipino seafarers have made to the maritime industry in recent years, several challenges faced by the Philippines, including a shortage of skilled seafarers and lack of career advancement opportunities, have raised questions about the quality of seafarers the country is producing. According to the results of an audit conducted by the European Maritime Safety Agency, compliance with the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers is said to be essential to improve the quality of Filipino seafarers and to ensure a continuous supply of skilled labor for the global shipping industry. This chapter illustrates the role of maritime training institutions in the Philippines and the need to invest in training and education programs to develop quality seafarers. It also points out that compliance with international standards and regulations is essential to ensure the quality and sustainability of the global seafarer labor market, and the need for local and international stakeholders to work together to address the challenges facing the Philippine shipping industry.

Keywords: the Philippines, seafarers training system, maritime training institution, MARINA, STCW Convention, EMSA audit

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## I. Introduction

In January 2017, the captain of a Philippine-registered cargo ship was indicted for an accident in which a moored cargo ship capsized in the port of Tomakomai, Hokkaido, Japan, killing and injuring two crew members. In June of the same year, the U.S. Navy Aegis ship USS Fitzgerald collided with the Philippine-flagged container ship ACX Crystal off the Izu Peninsula, killing seven crew members of the Fitzgerald. Every ship has Filipino sailors. As the birthrate declines and the population ages in developed and other maritime nations, Filipino seafarers are increasingly present in the global merchant shipping market.

The global pandemic of the new virus in 2020 has also highlighted the importance of shipping, which is responsible for more than 80% of world trade. Under the state of emergency declared in many countries around the world, people were encouraged to stay at home as part of their infection control measures, and work patterns shifted to teleworking and nest eggs at home. In a June 2020 statement by UN Secretary-General Antonio Guterres, seafarers were considered "essential workers" alongside medical personnel, and the International Maritime Organization (hereinafter referred as the IMO), a specialized UN agency, also issued a statement to make seafarers key workers. The UN Global Compact, through its recommendations and guidelines issued in May of the same year, also indicated its policy of positioning seafarers as "key workers".

The Philippines has a long history as a supplier of seafarers. The first maritime trade in the Philippines dates back to the 11th and 12th centuries when Chinese seafarers crossed the Sulu Sea to obtain spices from the Spice Islands and established trading posts around the Philippine provinces of Laguna, Mindoro, and Cebu (Amante 2003). Magellan's subsequent colonization of the Philippines was also triggered by his arrival in the 16th century in what is now the Philippine Islands. At the time, Spain was shipping spices, Chinese and Southeast Asian porcelain, ivory, lacquerware, and silk goods from Manila to Mexico, which, like the Philippines, was under Spanish rule. This trade is called the galleon trade, after the galleons that carried the various goods (Corpuz 1997). One may ask what circumstances have led the Philippines to lead the international seafarer labor market as a major supplier of seafarers from the days of the galleon trade in the distant past to the present.

One reason is the growing demand for seafarers in the international seafarers' market. In addition to these pull factors, the Philippine government's policy of actively sending workers abroad to earn foreign currency and related regulations, incentives to work abroad, and the establishment of a seafarer training program to equip seafarers with the necessary skills have

allowed the Philippines to take advantage of the opportunities created by the growing international demand for seafarers. The Philippines has been able to take advantage of the opportunities created by the growing international demand for seafarers. The nimbleness of the private sector in successfully tapping into new demand while responding to long-term changes in international markets, and the support for human resource development by governments and companies in other shipping countries that value Filipino seafarers as part of their workforce, have also played a major role. The seafarer environment has changed over the years, and recently the provisions of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers of 1978 (hereinafter referred as the STCW Convention) led by the International Maritime Organization (hereinafter referred as the IMO), have had a major impact on seafarer supplier countries. What issues must be addressed if the Philippines is to remain the world's largest supplier of seafarers in 2021? With these questions in mind, this chapter tries to provide an overview of the current situation of Filipino seafarers and their training process.

## II. Overview of Filipino seafarers in the global seafarer labor market

### A. Filipino seafarers in the global labor market

Filipino seafarers are in great demand in the global seafarer labor market because of their reputation for being highly skilled and experienced. They are also highly valued by shipping companies for their fluency in English, which is widely used for onboard communication. In addition, Filipino seafarers undergo extensive training and certification programs to meet international maritime regulations. These programs ensure that seafarers are well versed in the skills and techniques necessary for the safe and efficient operation of ships. The flexibility of Filipino seafarers to adapt to different work environments and cultures is further enhanced by their special working environment at sea, far from land. The ability to work effectively in multicultural and multilingual teams is also a highly desirable trait in the global shipping industry. Filipino seafarers serve in a variety of roles, including navigation, machinery operation, maintenance and repair, and onboard services on cargo ships, tankers, cruise ships, and many other types of vessels that are vital to the global trade and tourism industries. Contributing to the safe and efficient operation of ships, Filipino seafarers are an integral part of the global shipping industry. In addition, remittances from seafarers' overseas earnings to their families in the Philippines provide a significant source of household income and support the country's domestic economy. It is no

exaggeration to say that the hard work and dedication of Filipino seafarers is behind the Philippines becoming the world's largest supplier of seafarers in 2021.

Table 1: Deployed Filipino Seafarers by Major Category

Major Category	2016	2017	2018	2019	2020	2021
Officers	100,605	100,185	143,090	107,755	50,277	74,304
Rating	159,858	163,903	153,231	182,228	93,618	135,370
Non-Marine	179,203	185,375	186,072	217,747	73,302	135,800
Others (Navy Enlisted Classification)	3,154	-	-	-	26	43
Total	442,820	449,463	482,393	507,730	217,223	345,517

Source: IMMJ-PJMCC Foundation Inc. *\*2018-2021 Preliminary Data*

Table 1 presents data on the deployment of Filipino seafarers working on ocean-going merchant vessels. As one of the world's leading seafarer deployment countries, the Philippines has long played an important role in supplying skilled maritime workers to the global shipping industry, with over 500,000 seafarers deployed from the Philippines in 2019, representing a significant portion of the global seafarer labor force. However, the COVID-19 pandemic in 2020 had a major impact on the global seafarer labor market, and the deployment of Filipino seafarers was not spared. The disruption to maritime trade and travel caused by the pandemic resulted in a drop in the number of seafarers sent out from the Philippines to less than half that of the previous year. During this period, there were delays in replenishing seafarers after the end of embarkation contracts, and seafarers who were unable to go ashore became a major social problem, highlighting the need to ensure the welfare of these stranded seafarers. The table shows that as of 2021, when the pandemic began to subside in some areas, the number of deployed Filipino seafarers had recovered to 345,517. This may indicate that the supply of Filipino seafarers to the global seafarer labor market remained critical during the pandemic and that we need to continue our efforts to ensure the safety and welfare of seafarers in times of crisis.

Table 2: Deployed Filipino Seafarers by Top 10 Flags of Registry

Skills Category	2016	2017	2018	2019	2020	2021
Able Seaman	63,529	65,586	51,949	72,643	36,873	53,372
Ordinary Seaman	30,929	31,708	29,307	35,331	18,967	27,184
Oiler	32,183	31,689	29,708	33,178	16,701	24,224
Bosun	16,363	16,441	19,202	18,342	9,514	13,447
Chief Cook	16,347	15,753	18,090	17,130	8,564	12,598
Second Mate	15,474	15,680	18,217	17,014	7,976	11,970
Messman	12,605	12,842	14,209	13,908	7,545	10,855
Third Engineering Officer	14,053	13,991	17,926	15,386	7,231	10,615
Third mate	12,648	12,703	17,331	14,019	7,041	10,571
Waiter/Waitress	12,664	12,949	7,946	16,183	3,351	10,055
Other Skills	216,025	220,121	258,508	254,596	93,460	160,626
Total	442,820	449,463	482,393	507,730	217,223	345,517

Source: IMMJ-PJMCC Foundation Inc. \*2018-2021 Preliminary Data

Filipino seafarers play an important role in the global maritime industry and their skills are in high demand on various types of ships. Table 2 provides an overview of the occupations held by Filipino seafarers on board ships in the top 10 ship-registration countries. The most common occupations held by Filipino seafarers are able seamen, ordinary seamen, oilers, and bosuns in the deck sector. The deck department is responsible for the navigation and operation of the ship, including maintenance, cargo handling, and safety measures. The cook is the highest-ranking crew member in the galley or kitchen department and is responsible for the preparation of meals for the crew. The second and third officers are petty officers responsible for navigation and watch duties on the bridge. Messmen are responsible for cleaning and maintaining crew quarters and other common areas. The third officer is the petty officer in charge of the engine department, responsible

for the operation and maintenance of the ship's engines and machinery. Finally, waiters and waitresses are part of the service crew on passenger ships. Of these positions, the most important is the role of the bosun, the senior crew member in the deck department. They are responsible for ensuring that the ship's equipment is in good working order and that the crew is trained to perform their duties safely and effectively. The bosun works closely with the master and other officers to ensure that the ship is seaworthy, and that all cargo is loaded and unloaded safely. He is the liaison between the crew and the ship's officers and plays an important role in maintaining communication and teamwork on board. Overall, the occupations of Filipino seafarers reflect the diverse skills required to operate a vessel safely and efficiently. The high demand for Filipino seafarers in various occupations is a reflection of the value and quality of their training and experience, as well as their strong work ethic and adaptability to different work environments and cultures.

Table 3: Deployed Filipino Seafarers by Top 10 Flags Type of Vessels

Flags of registry	2016	2017	2018	2019	2020	2021
Panama	73,008	70,608	76,593	75,179	32,732	50,939
Bahamas	58,327	58,751	65,502	72,996	22,221	44,465
Republic of Marshall Islands	41,722	45,878	49,860	50,997	25,293	38,655
Liberia	39,901	42,846	44,794	47,147	24,789	37,458
Malta	29,542	32,397	37,318	40,710	17,942	29,294
Singapore	25,746	25,773	27,189	27,800	13,674	19,109
Netherlands	12,760	12,386	13,616	14,853	5,745	10,209
Italy	14,604	13,752	14,585	15,496	5,512	8,558
Cyprus	10,709	10,994	11,700	12,338	5,858	8,400
Bermuda	17,590	17,276	16,642	18,615	4,879	8,141
Other Flags of Registry	118,911	118,802	124,594	131,599	58,578	90,289
Total	442,820	449,463	482,393	507,730	217,223	345,517

Source: IMMJ-PJMCC Foundation Inc. \*2018-2021 Preliminary Data

The Philippines ranks first in the world in the supply of seafarers in 2021, a trend that has continued over the past few years. Despite this impressive performance, however, the number of domestic ocean-going merchant vessels is relatively small, and most Filipino seafarers are employed on foreign chartered vessels. Table 3 summarizes the deployment of Filipino seafarers by flag of registry for the top 10 countries and shows that the demand for Filipino seafarers on foreign chartered vessels is concentrated in Panama, Bahamas, Marshall Islands, Liberia, Malta, Singapore, Netherlands, Italy, Cyprus, Bermuda, and other flag states. The table also shows that the number of ships in the Philippines is the largest in the world. In addition, the table identifies the types of vessels to which Filipino seafarers are typically assigned, including bulk carriers, container ships, general cargo ships, and tankers. The reasons for the high demand for Filipino seafarers are many and varied, but overall, the importance of Filipino seafarers in the global shipping industry cannot be overstated. However, as in any industry, there are issues that need to be addressed to ensure a sustainable supply of seafarers, such as improving working conditions, ensuring adequate compensation and benefits, and addressing issues such as social isolation and mental health. By proactively addressing these challenges, stakeholders can ensure that the supply of Filipino seafarers remains robust and sustainable into the future.

Table 4: Seafarer workforce age profiles

	Management Level (Officers)	Operational Level (Officers)	Support Level (Ratings)
≤20 years	0.0%	0.0%	0.2%
21-30 years	3.1%	35.1%	26.8%
31-40 years	30.3%	41.1%	38.0%
41-50 years	37.4%	15.3%	24.0%
51-60 years	21.7%	7.1%	9.9%
≥61 years	7.5%	1.3%	1.1%

Source: BIMCO 2021

Filipino seafarers are in high demand in the global seafarer labor market, mainly because major developed shipping countries are facing serious demographic challenges such as low birthrates and aging populations. In Japan, for example, the average age of seafarers is around 48, making seafarer jobs less attractive options for the younger generation. Conversely, in the Philippines, where the average age of seafarers is around 25, ocean-going seafarers have become a popular occupation because of the high remuneration they can expect. Table 4 shows the age

distribution of seafarer workers, indicating that management-level seafarers are mainly in their 30s to 50s, while operational-level seafarers are mainly in their 30s, with an increasing number in their 20s. This trend is indicative of the Philippines' role as a major supplier of seafarers and the attractiveness of seafaring as a career choice in the Philippines and its potential to continue to meet the growing demand for seafarers in the global market.

Table 5: Average age profiles of seafarers at Operational Level by selected nationality

	Filipino	Ukrainian	Indian	Russian	Chinese	Korean (Republic of Korea)	Myanmar
≤20 years	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%	0.0%
21-30 years	23.1%	44.7%	47.5%	42.3%	38.9%	48.1%	21.5%
31-40 years	39.4%	34.4%	39.8%	34.8%	53.1%	16.4%	47.6%
41-50 years	24.3%	12.9%	7.7%	10.7%	6.6%	4.5%	23.0%
51-60 years	11.2%	6.3%	4.5%	9.0%	1.4%	0.8%	7.1%
≥61 years	2.0%	1.5%	0.6%	3.1%	0.1%	0.1%	0.8%

Source: BIMCO (2021)

Table 6: Average age profiles of seafarers at Support Level by selected nationality

	Filipino	Ukrainian	Indian	Russian	Chinese	Myanmar
≤20 years	0.0%	1.2%	0.1%	0.5%	0.6%	0.1%
21-30 years	23.9%	29.5%	30.7%	24.6%	31.2%	30.8%
31-40 years	37.2%	37.7%	43.4%	27.3%	33.3%	43.4%
41-50 years	27.4%	16.7%	18.5%	16.0%	23.3%	18.8%
51-60 years	10.5%	12.1%	6.6%	25.6%	10.8%	604.0%
≥61 years	1.0%	2.8%	0.7%	6.1%	0.7%	0.6%

Source: BIMCO (2021)

Table 5 presents the average age of operational-level seafarers by their nationality. As per the 2021 BIMCO report, the Philippines, the Russian Federation, Indonesia, China, and India are the top five seafarer supplying countries worldwide. However, the table also identifies Ukraine, South Korea, and Myanmar as emerging seafarer supply countries. Notably, Ukraine, India, the Russian Federation, and South Korea are also identified as emerging seafarer supply countries. The table reveals that the average age of Filipino seafarers at the operational level is 35.3 years, while seafarers from the Russian Federation and Indonesia have a slightly higher average age of 36.1 and 36.5 years, respectively. China and India, on the other hand, have a younger average age



of 32.9 and 29.8 years, respectively. Meanwhile, Table 6 shows a different trend in the age profile of seafarers at the support level. The table demonstrates that Korea has a comparatively small number of seafarers at the support level, and seafarers in their 30s make up the core of the onboard workforce in all countries.

## B. Japanese merchant fleet and Filipino seafarers

The dependence of the Japanese merchant fleet on Filipinos and other foreign seafarers is an important factor that highlights the importance of considering Filipino seafarers in the global seafarer labor market. The reliance on foreign seafarers is exemplified in Figure 1, which shows the shift of the Japanese merchant fleet from Japanese-flag vessels to foreign-flag chartered vessels. The international competitiveness of the shipping industry has led to cost-cutting efforts by companies, particularly in the ocean shipping industry, and as a result, the ratio of foreign chartered vessels to owned vessels has increased. These foreign chartered vessels are registered in foreign countries and operated by Japanese shipping companies, with Panama and Liberia being the main countries of registration. Advantages of foreign chartered vessels include taxation, less regulation, and being registered as a ship of convenience in many foreign countries. In the past, efforts to halt the decline in the number of Japanese-registered vessels included tax reform and restrictions on building and operating vessels in foreign countries, but the situation has not improved. Ironically, the employment of foreign-flag vessels and, by extension, foreign seafarers became more active in order to cut costs, and the number of Japanese seafarers declined sharply. The traditional practice of having Japanese crews on board Japanese-flag vessels has been replaced by the more cost-effective use of foreign-flag vessels, further highlighting the dependence of the Japanese merchant fleet on foreign crews.

Figure 1: Japanese and Foreign Ships in the Japanese Merchant Marine

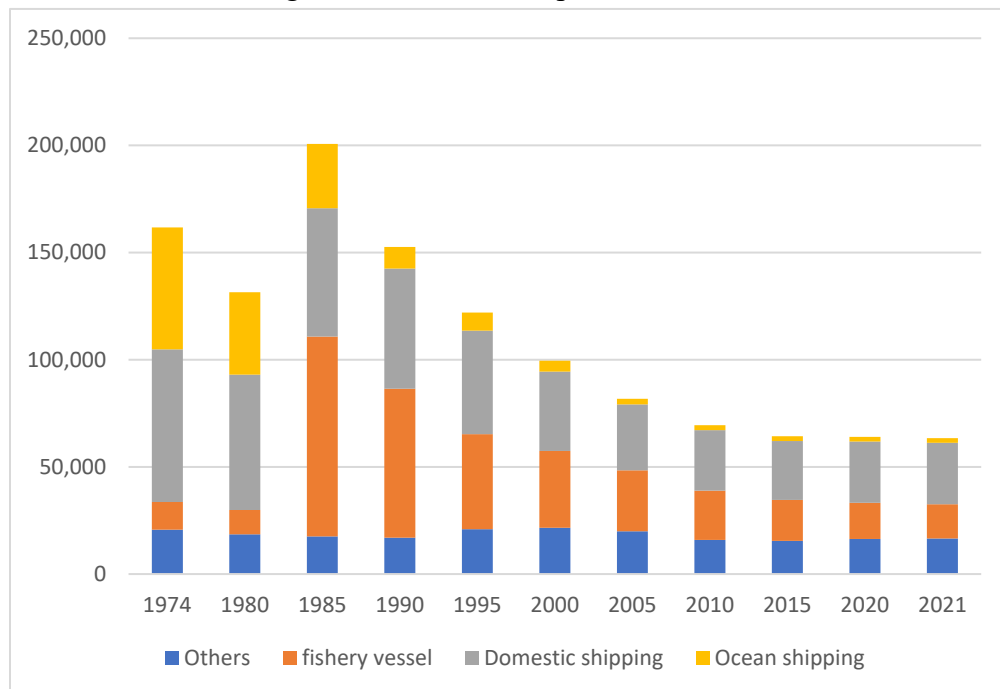


	Japanese ships		Flag-of-Convenience Ships		Japanese Fleet Total	
	Number of Ships	Gross Ton (,000)	Number of Ships	Gross Ton (,000)	Number of Ships	Gross Ton (,000)
1970	1,508	21,185	462	7,030	1,970	28,215
1980	1,176	34,240	1,329	30,987	2,505	65,227
1990	449	20,406	1,543	36,910	1,992	57,316
2000	134	10,098	1,905	59,040	2,039	69,138
2010	123	9,739	2,623	108,289	2,746	118,028
2011	143	11,320	2,672	109,150	2,815	120,470
2015	215	17,206	2,192	99,121	2,407	116,327
2020	270	23,408	1,970	94,309	2,240	117,717

Source: Created by the author based on data from Japan Shipowners’ Association Statistical Handbook (2021)

The Figure 1 discusses the changes in the number of Japanese and foreign vessels in the Japanese merchant marine. From this figure, it can be seen that there has been a change over time in the composition of Japanese merchant vessels. Specifically, the ratio of foreign vessels has declined, and the ratio of Japanese vessels has increased. The ratio of foreign vessels peaked in the 1980s and has been declining ever since. On the other hand, the ratio of Japanese vessels increased rapidly during the same period. Figure 1 shows that Japan has been increasing its dependence on its own merchant fleet and decreasing its dependence on foreign vessels year by year. This change in the composition of the Japanese merchant fleet is likely due to a wide range of economic, trade, and security considerations in Japan.

Figure 2: Number of Japanese seafarers



	1974	1980	1985	1990	1995	2000	2005	2010	2015	2020	2021
Others	20,711	18,507	17,542	16,973	20,925	21,575	19,926	15,896	15,482	16,373	16,586
Fishery vessel	12,883	11,363	93,278	69,486	44,342	35,857	28,444	23,060	19,075	16,866	15,999
Domestic shipping	71,269	63,208	59,834	56,100	48,333	37,058	30,762	28,160	27,490	28,595	28,625
Ocean shipping	56,833	38,425	30,013	10,084	8,438	5,030	2,625	2,306	2,237	2,200	2,165

Source: Created by the author based upon data from Japan Shipowners’ Association Statistical Handbook (2021)

### III. Improvement of “quality” required with a focus on compliance with the STCW Convention

#### A. International Rules and Standards and the Philippines

International conventions and standards for merchant shipping are set by the IMO and the International Labor Organization (hereinafter referred as the ILO). The need to protect workers who are vulnerable to other companies is no different for both land-based and maritime labor. Maritime workers, in particular, are characterized by long-term contracts and isolation from land, leaving their families behind. They work 24 hours a day in an environment where medical

assistance and police rights are inaccessible, and their work environment is fraught with dangers such as maritime accidents and falls overboard. Because seafarers work to ensure the safety of human life, cargo, and vessels, strict discipline is required at all times during employment, and in some cases, seafarers may be forced to work excessive hours outside the scope of their contracts. Considering the special nature of such maritime labor, some believe that it is not appropriate to apply land-based labor laws and regulations as they are to seafarers.

In addition to the ILO, the 1948 United Nations Conference on Maritime Affairs (hereinafter referred as the UNCME), the 1948 UNCME also adopted a convention on maritime labor, which was adopted by the UNCME. Maritime Conference adopted the Intergovernmental Maritime Consultative Organization (IMCO) Convention and established the IMO, which became the forerunner of other international organizations related to seafarers. Today, the IMO deals with technical and legal issues affecting maritime transport, such as safety at sea and prevention of marine pollution. The STCW Convention is an international standard established mainly by the ILO and IMO. It was adopted by the IMO in July 1978 and entered into force in April 1984 after the Liberian-flagged tanker Torrey Canyon ran aground in the English Channel in 1967, resulting in many maritime accidents. Many maritime accidents are caused by seafarer. It was widely recognized that many maritime accidents were caused by human error on the part of seafarers, and the establishment of internationally uniform maritime qualification standards was called for to improve the qualifications of seafarers (Kawaji 2014: 82).

Table 7: Five main nationalities of STCW seafarers as indicated by shipping companies 2021

	All Seafarers	Officers	Ratings
1	Filipino	Filipino	Filipino
2	Chinese	Chinese	Chinese
3	Ukrainian	Ukrainian	Indian
4	Russian	Indian	Ukrainian
5	Indonesian	Russian	Indonesian

Source: BIMCO/ICF (2021)

The STCW Convention conference emphasized the need to establish uniform standards for the knowledge, skills, and practices of seafarers in service for the safe navigation of ships. While the text of the STCW Convention consists of only 17 articles, the associated Annexes are voluminous. In addition to the 2010 Manila Amendments, the Convention contains an Annex, the STCW Code, mandatory standards for the provisions of the Annex to the STCW Convention, advisory guidelines, guidelines for the provisions of the Annex to the STCW Convention, and various related resolutions. However, the occurrence of accidents involving large vessels did not

stop even after the STCW Convention entered into force, and the 1995 amendments to the STCW Convention Annex took these comments into account and introduced the Global Maritime Distress and Safety System (GMDSS) for navigational officers. GMDSS means enhanced radio communications and ARPA simulator training for mariners. In addition, the 1995 amendment to the STCW Convention Annex established Port State Control, which requires that the country where a so-called foreign ship calls at a port be given the status of officer in charge of that ship.

Flag governments are empowered to inspect the qualifications of officers in charge and the safety measures of ships. In addition, new provisions have been added to the system for the accreditation of foreign seafarers, such as the requirement for flag governments to make prior arrangements among Contracting Parties for the approval of maritime licenses issued to seafarers by foreign governments (Convention Regulation I-10). In addition, an evaluation system based on the Convention's conformity verification system was introduced, including the creation of a whitelist of Contracting Parties recognized as meeting STCW Convention standards and the establishment of a seafarer quality standards system (Convention Regulation I-8) (Kawaji 2014: 82).

The second comprehensive review of the Annex took place at the IMO Conference of the Contracting Parties in Manila in June 2010, where the 2010 Manila Convention was adopted and entered into force in 2012. The Sub-Committee on Standards for Training and Surveillance, a sub-committee of the IMO's Maritime Safety Committee (MSC), reviewed the inconsistencies, interpretations, outdated provisions, MSC Directives, and technological advances in the Convention, while maintaining the structure and objectives of the 1995 amendments, and considered ways to ensure the necessary level of training and certification and surveillance through scientific and technological innovation (Japan Maritime Technology Transfer Organization 2011: 2).

According to Kawaji (2014), the main points of the 2010 Manila Amendment Convention can be summarized as follows. Specifically, the following eight points can be summarized: 1) adding requirements for seafarers' ability to adapt to various new technologies; 2) adding requirements for communication skills; 3) adding requirements for renewal of qualification certificates; 4) changing procedures and standards for physical aptitude of seafarers; 5) clarifying training requirements for tanker crews; 6) changing qualification requirements for engineers; 7) establishing new qualification certification system, and 8) confirmation of competency requirements for safety measures (Kawaji 2014. 82-83; Maritime Bureau, Ministry of Land, Infrastructure, Transport and Tourism 2015).

## B. Audits by the European Maritime Safety Agency

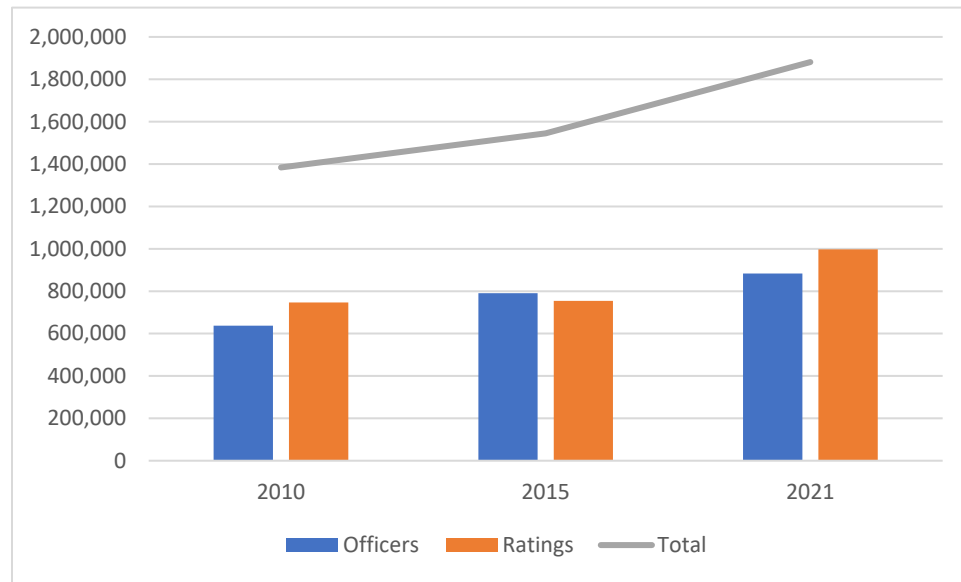
One of the factors that has prompted administrative reform in the Philippines in recent years has been the audits conducted by EMSA. These audits began in February 2006 and have been conducted eight times through April 2010, March 2012, April 2013, October 2013, September-October 2014, March 2017, and February-March 2020. According to media reports on the survey results, EMSA is concerned that in the Philippines, supervisory authority over domestic implementation of the Convention is dispersed among several agencies, and that with respect to the maritime qualification system and certification, persons who have not completed the training required by the Convention are serving in management positions such as captain, first officer, chief engineer, engineer. The Board is also concerned that examiners have no vested interest in the certification process. It is also pointed out that examiners must be in charge of disinterested persons, however, that this has not been ensured, and that the authorities in charge do not check the curriculum and educational methods of seafarer training institutions and the use of training facilities, but only check whether the necessary training facilities are in place. The government authorities in charge do not check the curriculum, training methods, or use of training facilities of seafarer training institutions. In addition, it was also pointed out that the authorities in charge do not check the curriculum, educational methods, and use of training facilities of seafarer training institutions (Nomura 2013:3, 2018:1).

In response, the MARINA completed 7 items pointed by the EMSA such as 1) revised PSG on maritime education programs, 2) revised PSG on inspection and evaluation maritime education programs, 3) revised PSG on monitoring of maritime education programs, 4) revised system of accreditation of assessment centers, 5) revised quality procedures and forms for accreditation of maritime training centers and assessment centers, 6) enhanced practical assessment standard scenarios, 7) updated quality standards system.<sup>2</sup> Needless to say, estimated global demand for STCW certified seafarers are growing, as long as shipping remains a major player in global logistics. At the background, there is a situation of that the global shipping industry is expanding rapidly and qualified seafarers to operate and maintain the increasing number of vessels. This includes not only cargo ships, but also cruise ships, offshore oil rigs, and LNG tankers.

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<sup>2</sup> The MARINA, World Forum online June 2022 presentation at <https://marina.gov.ph/wp-content/uploads/2022/06/2022-PHILIPPINE-RESPONSE.pdf> accessed on 30 June 2022.

Figure 3: Estimated global demand for STCW certified seafarers



	2010	2015	2021
Officers	637,000	790,500	883,780
Ratings	747,000	754,500	997,540
Total	1,384,000	1,545,000	1,881,320

Source: Created by the author based upon data from BIMCO/ICF (2015 & 2021)

At that time in 1995, the Philippine government closed from about 120 to 39 seafarer training institutions that did not meet international standards (Nakase 2001:35) and placed them on the whitelist. However, simply erasing non-conformities with the Convention did not improve the current situation, and recommendations by EMSA continued to be made. In this situation, based on Executive Order No. 75 of 2012 promulgated by the administration of Benigno S. Aquino III and its successor, Republic Act No. 10635 of 2014, Marine Industry Authority (MARINA) was ordered to take charge of the supervision of seafarer training institutions. This law also led to a radical reorganization of the administrative bodies in charge of supervising seafarer training institutions. Specifically, the administrative jurisdiction of seafarer administration, which had been handled by the Professional Regulation Commission, Commission for Higher Education (CHED), Technical Education and Skills Development Authority (TESDA), Department of Health (DOH), and National Telecommunications Commission (NTC), was now centralized in MARINA, which was given the authority to enforce the STCW Convention.

An EMSA audit conducted in March 2017 indicated that 59 disciplines in the Philippines were not up to STCW Convention standards. In response to these findings, the MARINA issued CHED/MARINA Joint Memorandum Circular No. 2019-01, which sets forth an integrated policy

on the Bachelor of Science in Marine Engineering (BSMarE) and Bachelor of Science in Maritime Transport (BSMT). The CHED/MARINA Joint Memorandum Circular No. 2018-01 was also promulgated as providing guidelines for joint supervision activities for maritime education programs.

In September of the same year, the MARINA submitted to EMSA a revised plan that included items to improve maritime education in seafarer training institutions. The MARINA resubmitted its report in October of the same year, but repeated requests to revise the plan resulted in the final report not being submitted until November 2019. In the near term, an audit by EMSA was conducted in February-March 2020, which indicated that 42 areas did not meet STCW Convention standards. EMSA is an organization that audits the maritime administration and maritime safety measures of non-EU countries issuing seafarer qualification certificates for compliance with the STCW Convention. Based on several audits, EMSA has issued recommendations to the Philippine government. As background, the number of merchant marine colleges and seafarer training institutions in the Philippines is rapidly increasing in proportion to the number of people who want to become seafarers, in response, inadequacies in curricula, training facilities, and the qualifications of instructors have surfaced, and there have been reports of rampant misconduct in the recognition of seafarer qualifications, including the issuance of false seafarer certificates.

## IV. Maritime Training Institutions in the Philippines

### A. Overview of Seafarer Training System

As we have seen above, one of the reasons behind the Philippine government's efforts to reform maritime administration is the significant contribution that Filipino seafarers make to the national economy. In addition, since guaranteeing employment opportunities for seafarers on ocean-going vessels is a top priority for the government, it is essential to improve and maintain the quality of seafarers in order to meet international conventions and standards.

In the Philippines, an island nation of more than 7,100 islands, ships have long been an important means of livelihood. As mentioned earlier, the history of Filipino seafarers' dates back to the Spanish colonial period, when many Filipino seafarers crossed the Pacific Ocean through the galleon trade between Manila and Acapulco, Mexico. Therefore, the history of seafarer training in the Philippines is long, starting with the establishment of the Escuela Nautica de Manila, Seafarers' Training Institute of Manila, based on a Spanish Royal Decree promulgated in 1820. As



described, Escuela Nautica de Manila was later reorganized into the Philippine Maritime Academy (PMMA), which continues to produce outstanding seafarers as the premier seafarer training institution in the Philippines.

As a rule, to become a seafarer, one must go to college and obtain a bachelor's degree. This section reviews the status of general education system reform as an issue affecting seafarer training. The primary education system in the Philippines was introduced in 1902; until the 2011 education reform, education in the Philippines consisted of six years of primary education starting at age six and four years of secondary education, for a total of 10 years of compulsory education.

In 2013, the Philippine government enacted the Strengthening Basic Education Act (RA 10533). Based on this law, the period of compulsory education was extended to four years of elementary school, four years of secondary school, and two years of high school, for a total of 12 years. The Philippine education system is mainly administered by the Department of Education (DepEd), with higher education, including merchant marine colleges and universities, under the jurisdiction of the CHED, and vocational and technical training under the Technical Education and Skills Development Authority (TESDA) under the Department of Labor and Employment (DOLE). The CHED is an agency managed and supervised by the TESDA under the DOLE. Training for seafarer rating is handled by a two-year vocational training school under the jurisdiction of TESDA.

Seafarer training in the Philippines begins with the completion of compulsory education, followed by entry into either a general college, merchant marine college, or special training school. Those who wish to become chief engineer can enroll in a general university and obtain a bachelor's degree in fields such as electronics, mechanical engineering, or marine engineering. The same is true for the BSMarE at the merchant marine school, which requires six months or two years of onboard service after graduation and passing the Officer-In-Charge of an Engineering Watch (OIC-EW) Licensure. After passing the OIC-EW, one year of onboard service and an examination is required to qualify as an officer-in-charge of an engineering watch. Those who wish to become captains must also obtain a bachelor's degree in shipping from a merchant marine academy. After obtaining the BSMT and passing the Officer-In-Charge of a Navigational Watch Licensure Examination, the officer will be promoted from first officer to captain after one year of service on board and an examination.

## B. Philippine Merchant Marine Academy

The PMMA is a government-owned and operated maritime school in San Narciso, Zambales, Philippines. In 1963, it was reorganized into the PMMA under the "PMMA Act" (Conversion Philippine Nautical School into Philippine Merchant Marine Academy: RA 3680). A

pioneer in maritime education in the Philippines, the PMMA is the only national university consisting solely of a merchant marine academy under the jurisdiction of the Department of Transportation and Communications (DOTC). 60-hectare campus with state-of-the-art maritime training facilities and an operating budget supported not only by DOTC but also by a wide range of local and international maritime industries. The operating budget is supported not only by DOTC but also by a wide range of national and international maritime industries. Student recruitment is nationwide and admissions are challenging.

The PMMA is the premier maritime school in the Philippines and is ranked as the premier maritime educational institution in the country. Offering a comprehensive curriculum that includes Bachelor of Science programs in Marine Transportation, Marine Engineering, and Naval Architecture and Marine Engineering, the PMMA is accredited by the CHED and recognized by the IMO as a Center of Excellence in Maritime Education and Training. It has state-of-the-art facilities, including a simulation lab, engine lab, and training ship. The Academy's mission is to develop highly skilled and competent seafarers with the knowledge, skills, and attitudes necessary to succeed in the maritime industry.

The curriculum includes theoretical and practical training in a variety of areas, including navigation, ship handling, cargo handling operations, marine engineering, and ship management. The third year of the four-year program is an onboard training period, and since most seafarer training institutions in the Philippines do not have training ships, students must secure onboard training opportunities on their own, which is said to be a barrier to degree completion. However, PMMA has an advantage over other training institutions because of its strong ties with the Armed Forces of the Philippines, which allows all students to participate in a two-month naval training program while at PMMA.

All of this shows that PMMA offers cadets a variety of opportunities for professional growth and development. In addition, the PMMA offers a wide range of co-curricular and extracurricular activities, including sports, cultural events, and community service programs. Opportunities to gain international experience are also offered through exchange programs and internships with partner institutions and companies. The PMMA also established a master's degree program in Maritime Management and Maritime Education and Training in 1996, allowing students to further their studies in areas such as Maritime Business Management and Port Management. The PMMA is a reputable institution that provides quality education and training to aspiring seafarers in the Philippines, and its commitment to the development of competent and skilled seafarers has made it a key player in the Philippine maritime industry.

### C. Maritime Academy of Asia and the Pacific

Maritime Academy of Asia and the Pacific (MAAP) is a private maritime school located in Camaya Point, Mariveles, Bataan, Philippines. Founded in 1998, the MAAP has since become one of the leading maritime schools in the Philippines. The MAAP is a private university operated by AMOSUP, the Philippines' leading maritime union, in cooperation with major Japanese shipping companies and the All Nippon Seamen's Union. The MAAP offers the Master of Maritime Technology and Master of Maritime Engineering degrees at the affiliated Center for Advanced Maritime Studies.

The MAAP students are eligible for AMOSUP scholarships and can also become scholarship students of Japanese shipping companies for future employment. AMOSUP's steering committee consists of the major Danish, Norwegian, and Japanese shipowners' associations, as well as the All-Japan Seamen's Union (JSU), the Japan Shipowners' Association, and the Japan International Maritime Organization (JIMO). The supporters of AMOSUP consist of the major Danish, Norwegian and Japanese shipowners' associations, as well as representatives of the JSU, the Japan Shipowners' Association, the International Maritime Management Association of Japan (IMMAJ), the International Labour Transport Federation and the International Council of Maritime Officials, making it a private institution. Although it is a private institution, it receives considerable support from overseas. Although it is a private institution, it receives very generous support from abroad. In fact, in 2009, the MAAP built a campus in Bataan five times larger than originally planned and moved the university there.

The MAAP's mission is to provide quality education and training to its students and to develop competent and responsible seafarers who will contribute to the development of the maritime industry. The school's curriculum is designed to meet the standards of the IMO and other regulatory bodies. The MAAP is also known for its innovative programs and initiatives that promote safety and sustainability in the maritime industry. The school has a research and development center that conducts research on various aspects of maritime safety, security, and environmental protection. It also has a training center that offers courses on leadership, safety, and other topics for seafarers. The MAAP has partnerships with various national and international institutions and organizations to provide students with international experience and professional development opportunities. The MAAP also has an active alumni association that supports the professional and career development of its graduates. The MAAP is a reputable institution that provides quality education and training to aspiring seafarers in the Philippines. Its innovation and commitment to excellence have earned it an important position in the Philippine maritime industry.

#### D. John B. Lacson Maritime University

John B. Lacson University in Iloilo, about an hour's flight south of Manila, is a private merchant marine college founded in 1948. Its founder, Juan Bautista Lacson, is a man of varied background, having graduated from what is now PMMA in 1920, and having served in the U.S. Coast Guard during the war and obtained U.S. citizenship. The school, with its main campus in Iloilo City, has a training center in the neighboring bay of Guimaras Province, providing a school environment for on-the-job training. The school offers a bachelor's degree in Business Administration, Customs Management, Cruise Ship Management, and Tourism Management, in addition to a bachelor's degree in Marine Transportation and a bachelor's degree in Marine Engineering. As a result, the admission examinations are highly competitive. In 1990, the first maritime high school in Japan was established to provide students with an integrated education to become a maritime engineer.

#### E. MOL Magsaysay Maritime Academy

The MOL Magsaysay Marine Academy (MMMA) is a joint venture between Mitsui O.S.K. Lines (MOL) and Magsaysay Marine Corporation (MMC) in the Philippines. It was established in 2007 and is located in Canlubang, Laguna. The school offers degree programs in maritime education, including a Bachelor of Science in Marine Transportation and a Bachelor of Science in Marine Engineering. The 13.2-hectare campus is flanked by an education building, a parliamentary training ship, a swimming pool where students can also practice lifeboat descent, and student housing. The simulation training ship used for classes is equipped with the same facilities as the actual ship, including a bridge and main engine room equipped with the latest simulators, and a combination of actual and simulator training is provided. The school's simulators are equipped with the latest technology to provide students with realistic training scenarios. The labs are designed to provide hands-on training in a variety of disciplines, including navigation, shiphandling, and marine engineering. The MMMA also offers students the opportunity to gain international experience through partnerships with other maritime institutions and organizations around the world. In particular, the school has established relationships with major maritime companies, providing graduates with career advancement opportunities and professional growth.

The College is committed to promoting safety, security, and environmental protection in the maritime industry. It incorporates these principles into its curriculum and offers training programs in these areas for students and seafarers. Accredited by the CHED and recognized by international organizations such as the IMO and the International Association of Maritime

Universities, the MMMA is a reputable provider of quality education and training for aspiring seafarers in the Philippines. The school offers a four-grade system, the final grade is onboard training, with approximately 300 students per grade and 600 students in the second grade at the time of the 2019 field survey. About half of the school's graduates will be employed by MOL and the other half by other shipping companies through the Magsaysay Group. The school's partnership with MOL, one of the world's largest shipping companies, and the MMC, a leading seafarer staffing company, is expected to give graduates an edge in the highly competitive global marketplace.

#### F. K-line Academy

K-Line Maritime Academy Philippines (KLMA) is a maritime training institute located in Pasay City, Manila. It is a joint venture between Kawasaki Kisen Kaisha, Ltd. The academy offers maritime education programs such as Bachelor of Shipping and Bachelor of Marine Engineering. It also offers short courses and training programs for seafarers, including basic safety training and tanker proficiency. The KLMA is accredited by the CHED and is a reputable educational institution providing quality education and training to aspiring seafarers in the Philippines. Its partnerships with K-Line, a leading Japanese shipping company, and PTC, a leading seafarer recruitment agency, give its graduates an edge in the competitive global marketplace. The academy offers scholarships to students from PMMA, John B. Lacson University, University of Cebu - Maritime Education and Training Center, and the International Maritime Academy of Lyceum University in Batangas, Philippines, and also accepts maritime cadets from Lyceum University, Philippines. In addition to this, we work with Cristal E-College in Bohol to provide scholarships to selected outstanding students from all over the country.

#### G. National Maritime Polytechnic

The National Maritime Polytechnic (NMP) is a government agency under the supervision of the DOLE of the Philippines. Its main objective is to provide training and education for seafarers and other maritime personnel in the country. The NMP was established in 1978 as a training center for the development of the maritime industry in the region. Its mission is to enhance the knowledge and skills of Filipino seafarers, bring them up to international standards, and support the domestic maritime industry. The agency offers a variety of training programs, including basic and advanced courses in navigation, engineering, safety, and security. It is also responsible for conducting

research and development programs to improve the quality of training and education for seafarers in the Philippines and works with other government agencies and international organizations to ensure that seafarer education programs are current and relevant to the needs of the industry. One of NMP's major contributions is its efforts to provide free training to underprivileged Filipinos who aspire to work in the maritime industry. In cooperation with various organizations, the NMP provides scholarships to deserving candidates who are unable to pay for their training. The National Maritime Polytechnic plays an important role in providing quality training and education to Filipino seafarers and other maritime professionals. Its efforts contribute to the development of the Philippine maritime industry and support the Philippines' position as a major supplier of seafarers in the world.

#### H. Davao Maritime Academy

Davao Maritime Academy (DMMA) is a maritime educational institution located in Davao City, Philippines, established in 1974 as a non-stock, non-profit corporation with the purpose of providing quality education and training to aspiring seafarers. DMMA offers undergraduate courses in marine transportation and marine engineering, as well as short courses and training programs for seafarers. The academy is accredited by the CHED and the MARINA, which ensures that its programs meet national and international standards for maritime education and training. The Academy is equipped with state-of-the-art facilities and equipment, including a full mission bridge simulator, engine room simulator, and survival training pool. These facilities allow students to undergo realistic simulations of actual shipboard operations and emergency situations, enhancing their learning experience and preparing them for their future careers as seafarers. The DMMA is also committed to humanistic and emotional education and promotes the development of ethical and responsible seafarers who are committed to safety, security, and environmental protection and it has a code of conduct that all students and faculty must follow and regularly conducts activities and programs that promote social responsibility and community involvement. The DMMA regularly conducts activities and programs that promote social responsibility and community involvement. This makes DMMA a reputable institution that provides quality education and training for seafarers. Its commitment to value formation and community involvement has made it a leading institution in the maritime education sector in the Philippines.

## V. Concluding note

The global shipping industry has undergone significant changes in recent years, creating a growing demand for quality seafarers who are up to date with the latest technology and regulations. As a result, shipping countries like the Philippines are faced with the need to ensure that their seafarers meet international regulations and standards. An overview of Filipino seafarers in the global labor market reveals the fact that Filipino seafarers make up the majority of the world's maritime workforce. At the same time, however, through audits conducted by EMSA, it became clear that there are instances of non-compliance with regulations such as the STCW Convention. This is of concern not only because it threatens the safety of seafarers, but also because it affects the reputation of the Philippine maritime industry. To address this issue, this chapter has found that a multifaceted approach that includes not only technical training but also the improvement of soft skills such as communication, cultural sensitivity, and teamwork to comply with international standards and regulations can be helpful in real onboard situations. Seafarer training institutions throughout the Philippines also taught us the need for continuous training and development to keep pace with the changing demands of the maritime industry. The attempts to train and secure quality seafarers in the Philippines, which can be achieved through collaboration among the government, private sector, and academia, with a focus on providing funds and resources for continuous improvement in maritime education and training, is one form of international cooperation. This chapter confirms that the maritime education and training in the Philippines, which has been undertaken to improve the quality of maritime education and training in the Philippines, has made significant achievements in recent years, including new training facilities and revised maritime curricula, in addition to reforms in maritime administration by the government. However, the challenges facing these institutions in terms of funding, facilities, and teacher training remain. To ensure the sustainability of the Philippine maritime industry and to maintain its position as a major supplier of seafarers in the global labor market, the involvement and cooperation of not only the Philippine government but also other advanced maritime nations is necessary. In order to ensure the sustainability of the Philippines' position as a major supplier of seafarers in the global labor market, with particular focus on the current situation of Filipino seafarers and the importance of compliance and adherence to international standards for seafarer quality as required by the global shipping industry, the knowledge and education of maritime educational institutions actually located in the Philippines. The study identified that ongoing efforts, including the updating of staff, machinery, and overall facilities, are essential. Needless to say, the achievement of these goals will

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require the cooperation of all parties involved, including not only the government, which governs the maritime administration, but also the seafarers' education institutions located in the Philippines, which are committed to compliance, quality, and continual improvement.

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