

DISSERTATION

**INVESTIGATION OF POSSIBILITIES:
DEVELOPING INTERNATIONAL JOB OPPORTUNITIES
FOR SEAFARERS IN INDONESIA**

CAKRA PRAPANCA YUDA

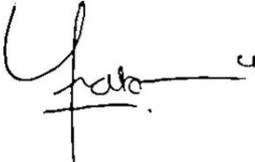
A dissertation submitted to the World Maritime University in partial fulfillment
of the requirements for the award of the degree of Master of Science in Maritime
Affairs

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Declaration

I certify that all the material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

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Abstract

Title of Dissertation: **Investigation of Possibilities: Develop International Job Opportunities for Seafarers in Indonesia**

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Currently, one of the essential issues in the Indonesian maritime industry is how to develop international job opportunities for seafarers in Indonesia, particularly for Bachelor/Diploma degree graduates in maritime education training institutions in Indonesia. This research study aimed at looking at the current nature and construction of maritime education training systems in Indonesia, the main factors that inhibit the access of Indonesian Bachelor/Diploma Degree Graduates to employment in international shipping fleets, and finding approaches, strategies, and intervention policies to help address the challenges of graduates from the Indonesian maritime education training (MET) systems. This research study employed an exploratory research design and analyzed data using thematic analyses (qualitative data) and descriptive statistics (quantitative data). The result of this research study showed Indonesia has 110 maritime education and training institutions that have been approved by Indonesian Maritime administration. These consist of 97 private and 13 public maritime education training institutions (METI). These are autonomous entities and their management is profit-oriented based on economic principles and productivity that are prioritized to enhance and develop public services in the maritime education and training systems. Therefore, this condition can be optimized by all public maritime education training institutions in Indonesia to address issues that inhibit access of Indonesian Bachelor/Diploma degree graduates to employment in international shipping fleets. This research study identified deficiencies in the English language proficiency and skills of Indonesian seafarers. It also highlighted the inadequate relationships and cooperation between Indonesian Maritime Education and Training Institutions (METI) and national and international stakeholders within the maritime industry. Furthermore, the study found a lack of international collaboration between METI and global shipping companies, specifically in terms of the latter's involvement during curriculum development and evaluation. In light of these factors, it is imperative for the Indonesian government and all maritime stakeholders to collectively enhance and develop international employment opportunities. This can be achieved through the adoption of the approaches, strategies, and intervention policies delineated in this research to overcome the challenges faced by graduates from Indonesian Maritime Education Training (MET) systems in securing international employment.

KEYWORDS: International Job Opportunities, Current nature and constructions, MET system, Maritime Stakeholders, Main factors, Approaches, Strategies, Intervention Policies, English Competency and Skill, International cooperation, Maritime Shipping Industries Cooperations.

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List of Abbreviations

AMOSUP	Associated Marine Officers Union of The Philippines
BIMCO	The Baltic and International Maritime Council
CBA	Collective Bargaining Agreement
CMA	Crew Manning Agency
DMA	Danish Maritime Authority
EBC	English Brand Camp
EEZ	Exclusive Economic Zone
ICS	International Chamber of Shipping
IELTS	International English Language Testing System
IGR	Indonesian Graduate
ILO	International Labour Organization
IMA	Indonesian Maritime Administration
IMI	Indonesian Maritime Institution
IMEC	International Maritime Employer's Council
IMO	International Maritime Organization
IMMAJ	International Mariners Management Association of Japan
IMSAS	International Member State Audit Scheme
ISF	International Shipping Federation
IST	Indonesian Student
ISU	Indonesian Seafarer Union
ITF	International Transport Federation
JNG	Join Negotiating Group
KSA	Korean Shipowners Association
MET	Maritime Education training
METI	Maritime Education Training Institution
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MSC	Maritime Safety Committee
PBT	Paper Based Test
PMA	Philippine Maritime Administration
PMI	Philippine Maritime Institution
P&O	People and Organizations
PSC	Port State Control
PST	Philippine Student

PSU	Philippine Seafarer Union
PTE	Person Test of English
RQ	Research Question
STCW Convention	International Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended
UNCTAD	United Nations Conference on Trade and Development
QMS	Quality Management System
QSS	Quality Standard System
WMU	World Maritime University
IST1	Indonesian Student Answer Number 1
PST1	Philippine Student Answer Number 1
IGR2	Indonesian Graduate Answer Number 1
IMI2	Indonesian Maritime Institution Answer Number 1
PMI20	Philippine Maritime Institution Answer Number 20
IMA4	Indonesian Maritime Administration Answer Number 4
PMA10	Philippine Maritime Administration Answer Number 10
CMA5	International Crew Manning Agency Answer Number 5
ISU1	Indonesian Seafarer Union Answer Number 1
PSU7	Philippine Seafarer Union Answer Number 7

Chapter 1: Introduction

1.1 Background

Indonesia, as an archipelagic state, encompasses a vast land area of approximately 1.92 million square kilometers. The geographical region under consideration includes inland bodies of water, an Exclusive Economic Zone (EEZ) spanning roughly 2.7 million square kilometers (200 nautical miles), and a territorial maritime area totaling around 3.1 million square kilometers. According to Purwaka (1989), Indonesia possesses the most expansive tropical littoral beach on a global scale. Indonesia possesses a vast terrestrial expanse, including nearly 70% of its total land area, which spans a total of 5.8 million square kilometers. The country in question boasts the second-longest coastline in the world, trailing only behind Russia, with an estimated length of approximately 95,181 km (Utami et al., 2023).

The sea plays a pivotal role in facilitating connectivity among the islands of Indonesia, hence leading to a growing demand for transport infrastructure in the country. Indonesia's seafarer requirements are also on the rise, which naturally leads to a strong enthusiasm among Indonesians for working on board. The current count of Indonesian seafarers in 2017, including those employed by international shipping companies, stands at approximately 875,933 seafarers. Furthermore, the aggregate count of vessels in Indonesia amounted to 21,000. The current figure is sufficient to meet the human resource demand for seafarers on Indonesian vessels. The absence of Indonesian flagged vessels had a significant impact on several Indonesian seafarers who are eager to join foreign shipping companies. Consequently, a substantial number of Indonesian seafarers were prepared to compete with their foreign counterparts in the future (Priadi et al., 2018). Additionally, according to the Ministry of Transportation concerning the aggregate count of national and international vessels in Indonesia, according to information provided by the Directorate of Shipping and Maritime Indonesia on June 20, 2024, there were approximately 52,861 Indonesian flagged vessels overall, comprising 47,491 cargo vessels and 5,370 passenger vessels. If the number of crew standard in one vessel is around 20 crew per year, the total number of seafarers that be able to cover in Indonesia flagged vessel is around 1.057.220 seafarers. However, according to data

derived from the Ministry Transportation concerning the total number of seafarers, categorized by gender, on April 13, 2024, the total number of Indonesian seafarers is around 1,471,649. Therefore, in this current condition, the number of Indonesia-flagged vessels does not cover the number of Indonesian seafarers, which forces them to compete in international shipping fleets (Bayu, 2022).

The President of Indonesia Seafarers Unity's Contrast Finding Statement revealed that a significant number of young individuals in the United States, United Kingdom, Denmark, and Germany, who are employed by prominent foreign shipping companies such as P&O, Maersk Line, and Hapag Llyod, exhibit hesitancy towards working at sea. Instead, they prefer to work on land, where they can earn a higher salary compared to that of seafarers (Munaf & Windari, 2015). According to BIMCO/ICS, The Seafarer Workforce Report 2021 reveals that the worldwide seafarer supply has risen from 1,647,494 in 2015 to 1,892,720 now. This implies that there are currently 857,540 seafarers and 1,035,180 ratings (Unctad, 2021) Presently, the shipping sector must improve its training and recruitment efforts in order to meet the increased demand for 89,510 officers by 2026 (Goulielmos, 2021). In this particular scenario, Indonesian seafarers were presented with a significant opportunity to secure employment with international shipping enterprises. However, the outcome proved to be contrary to expectations, as Indonesian seafarers faced greater challenges in securing employment with foreign shipping corporations compared to their counterparts from other nations. For instance, the Philippines holds the distinction of being the foremost global provider of seafarers. Amidst the COVID-19 pandemic in 2019, the Philippines generated a substantial revenue of \$30 billion through its overseas workforce. Furthermore, Indonesia ranks as the third greatest supplier of seafarers, following Russia (Chibana, 2023).

A similar conclusion was drawn from the data or information presented by the Minister of Indonesia during the higher maritime education graduation ceremony in Jakarta in 2021. He stated that, of the 1,2 million Indonesian seafarers in total, no more than 28.5% are currently employed internationally, primarily those who have completed the maritime education training (MET) program run by the Indonesian Ministry of Transportation. The development of human resources in the transportation sector is directly under the purview of an organizational unit under the

Indonesian Ministry of Transportation (Indonesia, 2022). The Agency of Human Resources Development on Transportation is the organization under consideration in this particular instance. This organization is tasked with the primary responsibility of delivering and cultivating human resources in the transportation sector, with the aim of cultivating individuals who possess professionalism, discipline, accountability, and integrity that aligns with both national and international norms (Sasono, 2023a) Hence, the Agency of Human Resources Development on Transportation receives support from a subordinate organizational unit known as the Centre of Human Resources Development on Sea Transportation, in the execution of its responsibilities. The primary objective of this organization is to facilitate the provision and cultivation of human resources in the field of marine transportation. Furthermore, these individuals should be capable of effectively competing at both national and worldwide levels (Sasono, 2023a). In the present scenario, the aforementioned organization received assistance from 12 maritime education training (MET) administered by the Ministry of Transportation in Indonesia. These trainings have been established in various regions of the country, encompassing 1 higher maritime education training, 9 maritime polytechnics, and 2 merchant marine academies (Sasono, 2023b).

Currently according to some data that are reported by three of the largest and oldest maritime education training (MET) under the Ministry of Transportation in Indonesia through performance reports in 2022, found that from the total of graduates in Higher Maritime Education Jakarta in 2022 were 81 graduates, consisting of 11 graduates (13,58%) that have been working in the national level, 13 graduates (16,05%) that have been working in the international level, and 57 (70,37%) graduates unemployed. This means not exceeding 17% of graduates of the higher maritime education training Jakarta that have been employed in the international level (Fahmi, 2022). A similar finding found that the total number of graduates in the Polytechnics Maritime Semarang in 2022 was 375, consisting of 292 graduates (77,87%) that have been working at the national level, 51 graduates (13,60%) that have been working at the international level, and 32 graduates (8,53%) that have not been working. That means not exceeding 14% of graduates of the Polytechnics Maritime Semarang have been employed at the international level (Ashari, 2023). A similar finding regarding this

information is that the total number of graduates in the Polytechnic Maritime Makassar in 2022 was 665, consisting of 631 graduates (94,89%) that have been working at the national level, 34 graduates (5,11%) that have been working at the international level, and no graduates unemployed (Amiruddin, 2022). It means that not exceeding 6% of graduates of Polytechnics Maritime Makassar have been employed at the international level. Currently, Indonesia is the fifth largest country in the world for supplying seafarers (officers) in the world (Unctad, 2021). In this case, the contribution of officer-level seafarers at the international level must be increased, hence through this research, the researcher will focus on how to solve this current issue particularly to develop job opportunities for Bachelor/Diploma Degree graduates in the maritime education training Institutions (METI) under the Ministry of Transportation in Indonesia.

1.2 Problem Statement

As stated in Chapter 1.1, Indonesia is the third greatest provider of seafarers globally, following the Philippines and Russia. It ranks as the third and fifth largest supplier (Unctad, 2021). Recently the shipping industry has to increase the training and recruitment process, particularly to the officer level because it will be an additional necessity of this level around 89,510 officers in 2026. Therefore, Indonesia will focus on the officer level at maritime institutions in Indonesia, this research will focus on how to develop job opportunities for Bachelor/Diploma Degree graduates of Maritime Education Training (MET) under the Ministry of Transportation in Indonesia. However, currently the lack of national flagged vessels in the country will force the Bachelor/Diploma degree graduates to compete at an international level. According to data information in Chapter 1.1, these graduates are not employed or even do not exceed 16,05% who have been working at an international level. In this case, all relevant parties need to cooperate in looking for the core problem from these issues and find the solution to solve these problems.

1.3 Research Aims and Objectives

This research aims to contribute to an understanding of the reasons for the limitations in the employment of Indonesian seafarers in the international maritime industry and

suggest ways to enhance the entry of these seafarers into the international industry. This research has the following aims and objectives:

1. To identify the main reasons why the Bachelor/Diploma degree-graduates of the Maritime Education Training (MET) systems in Indonesia find it difficult to obtain comprehensive employment possibilities in the international shipping fleet.
2. To develop a policy framework and recommend strategies that could help enhance access to international job opportunities for Bachelor/Diploma Degree Graduates of Maritime Education Training (MET) in Indonesia.

1.4 Research Questions

The following research questions have been formulated to achieve the aim of the research:

1. What is the current nature and construction of the Maritime Education Training (MET) system in Indonesia?
2. What are the primary factors that impede Bachelor/Diploma-degree graduates of Indonesia's Maritime Education Training (MET) system from gaining employment within the international shipping fleet?
3. What approaches, strategies, and policy interventions can help address the challenges to international employment of graduates from the Indonesian Maritime Education Training (MET) system?

1.5 Research Methodology and Methods

This research will employ a mixed method design defined as the kind of design research in which the investigator attempts to integrate the qualitative and quantitative research methodologies, (Schoonenboom & Johnson, 2017) The qualitative method will be conducted first and the result of qualitative data analysis, will be used to develop the questionnaire. Furthermore, data will be collected through the interview process. The qualitative data will be analysed using thematic analysis utilizing the

Delve application software and quantitative data will be analysed using the Descriptive statistics utilizing Microsoft Excel.

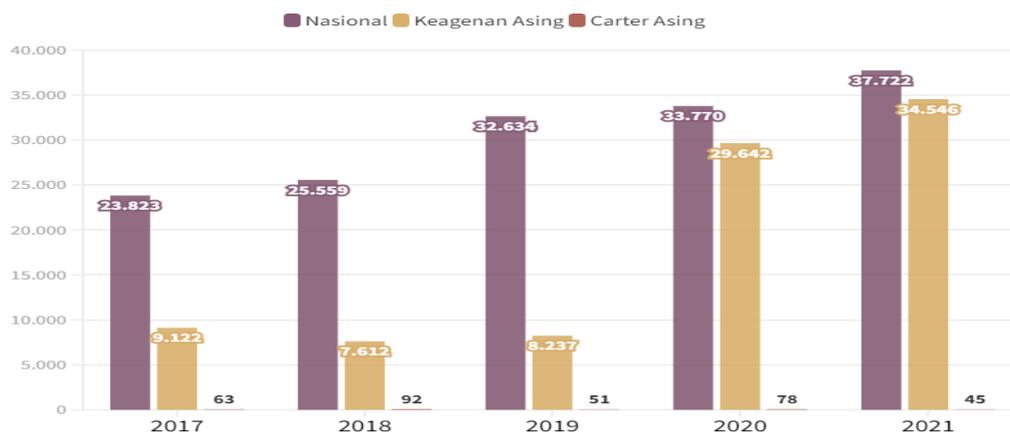
Chapter 2: Review of Related Literature

This chapter aims to examine several contributing factors that have influenced the resolution of the gap in the research problem. This was achieved through a comprehensive review of relevant literature from various sources, focusing on the current state of maritime education training (MET), international employment prospects for seafarers, proficiency in English language skills, and the significance of quality control protocols in maritime education training (MET).

2.1 The Maritime Trade and Shipping Activities in Indonesia

Maritime trade and shipping activities in Indonesia are of paramount importance on a global scale. Sea transport plays a significant role in facilitating local trade, with the national shipping fleet in Indonesia mostly engaged in domestic shipping operations. Nevertheless, Indonesia's shipping operations extend beyond local services and frequently involve international services carried out by a consortium of domestic shipping companies that have collaborated with a few global shipping companies (Lebang, 1991). As per the Ministry of Transportation's yearly report, Indonesia's sea transport cargoes amounted to 653 million tonnes, with 89% being transported by the international fleet and the remaining 11% being transported by the local fleet. (Putra et al., 2017). Figure 1, which was provided by the Ministry of Transportation in 2021, supports a similar conclusion.

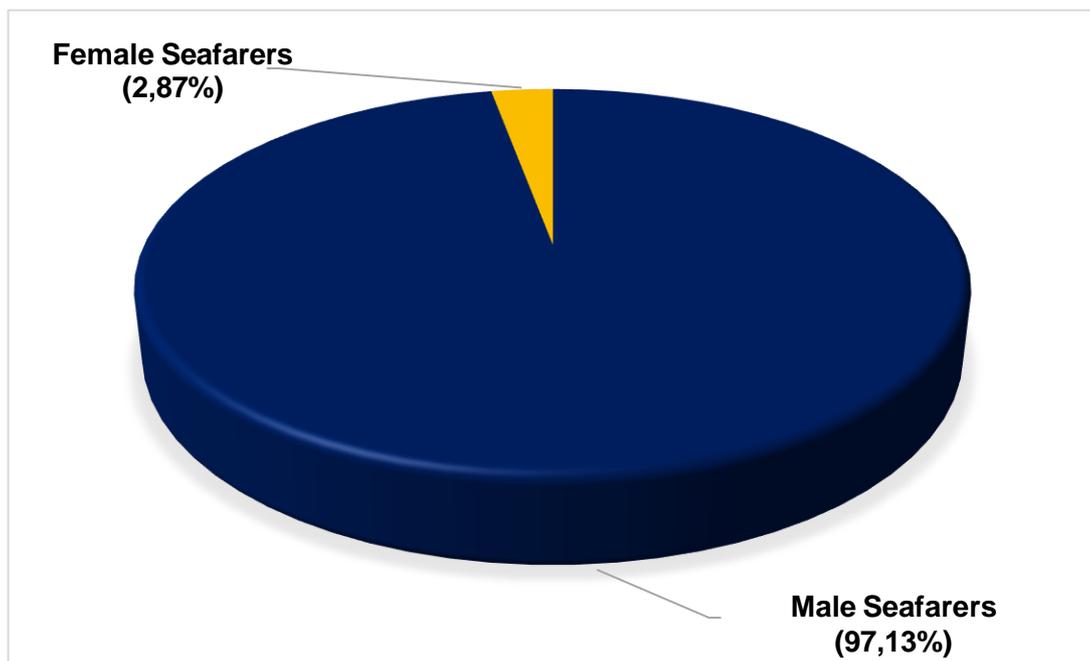
Figure 1. *The aggregate count of national and international vessels in Indonesia*



Note. Adapted From Ministry Transportation Indonesia's data. (2021). *the aggregate count of national and international vessels in Indonesia.*

The Ministry of Transportation reported that in 2021, Indonesia has a total of 72,313 flagged vessels. This includes 37,722 national vessels, 34,546 international vessels, and 45 international charter vessels. The aforementioned figures have experienced a growth of 13.9% compared to the preceding year, specifically amounting to approximately 63,490 vessels. This figure includes 33,770 vessels of national origin, 29,642 vessels of foreign origin, and the remaining 78 vessels of international charter origin (Bayu, 2022). Additionally, the Ministry of Transportation has provided statistical data on the total number of Indonesian seafarers, as of April 13, 2024.

Figure 2. *The total number of Indonesian Seafarers*



Note. Adapted from Ministry Transportation Indonesia's data. (2024). *The total number of Indonesian seafarers.*

Based on data provided by the Indonesian Ministry of Transportation, the aggregate count of seafarers, categorized by gender, amounted to 1,471,649 individuals. This figure comprises 1,429,362 (97.13%) male seafarers and 42,287 (2.87%) female seafarers (Directorate General of Sea Transportation, 2024).

Furthermore, according to data from the Directorate of Shipping and Maritime Indonesia on June 20, 2024, there were approximately 52,861 Indonesian flagged vessels, comprising 47,491 cargo vessels and 5,370 passenger vessels. Based on

the total crew standard, each vessel could accommodate up to 20 crew members, which means that an Indonesian flagged vessel could accommodate up to 1,057,220 seafarers overall, while the Ministry of Transportation's data as of April 13, 2024, indicates that there are approximately 1,471,649 Indonesia's seafarers overall. In summary, there are now not enough Indonesian flagged vessels to accommodate all Indonesian seafarers, which forces Indonesian seafarers to compete with international shipping fleets.

2.2 Maritime Education Training (MET) Systems

Presently, the primary function of education is to provide supplementary resources that can either alter or maintain the existing social order. It is therefore imperative that education is situated within the social context and includes an examination of the impact on individuals' future (Manuel, 2017). The essential role of Maritime Education Training (MET) cannot be underestimated, particularly within the current global market scenario and the International Convention on Standard Training, Certification, and Watchkeeping (STCW) as amended in 2010, which states that up to 90 percent of maritime accidents are caused by human error. Therefore, Maritime Education Training (MET) has an essential role for seafarers to acquire well-rounded training and education, be capable of following instructions, controlling risk, solving problems, and being happy in physics and emotionally in order of following the instructions, controlling the risk, solving problems, and being happy in physics and emotionally in order following the instructions, controlling the risk, solving problems, and being happy in physics and emotionally to ensure the safe operation, secure, clean, and efficient safety of life at sea (Baylon & Santos, 2011).

2.2.1 Overview Indonesia's Maritime Education Training Institutions (METI)

Indonesia's Maritime Education and Training (MET) was established in 1948 and has since become one of the leading countries in producing seafarers worldwide. In this scenario, it is imperative that education is situated within the social context and includes an examination of the impact that individuals have on their future (Lebang, 1991). Presently, inside an ever- changing industry, the development of human resources plays a crucial part in guaranteeing effectiveness, security, and the long-term viability of operations (Svilicic

et al., 2019). To meet the demand for human resources development in the transportation sector, the Ministry of Transportation in Indonesia has designated the Maritime Education Training (MET) as the agency responsible for human resources development in transportation. The primary objective of this agency is to offer Bachelor/Diploma degree education, advanced education, and technical education in transportation. This initiative is by President Regulation Number 51, 2012, which pertains to human resources in transportation that have competencies in transportation based on the determined competencies through formal and non-formal education way (Sasono, 2023b). To provide the human resources development on sea transportation, the Agency of Human Resources Development on Transportation was supported by the Center of Human Resources Development on Sea Transportation which has the primary task and function to prepare the sea Transportation officers in Indonesia according to the regulation from the Ministry of Transportation number 17 in 2022 concerning its the organization and working procedure, namely supporting the president the transportation services (Amiruddin, 2022). At present, the maritime administration in Indonesia has approved 110 Maritime Education Training Institutions (METI), which comprise 97 private maritime establishments and, 13 public maritime institutions. Additionally, there are 40 training centers within the MET. As a result, the maritime institutions governed by the Institute for Human Resources Development on Sea Transportation are as follows: One higher education institution, nine polytechnics, and two merchant marine academies, which are dispersed throughout all of Indonesia (Directorate General of Sea Transportation, 2024). Currently, Indonesia has 12 public Maritime Education Training Institutions (METI) under the Center for Human Resources Development on Sea Transportation, which function as public service agencies. According to Indonesian Law Number 1, 2024, Articles 68 and 69, these organizations have the primary task and function of providing public services that implement a flexible financial management pattern, prioritizing productivity, efficiency, and effectiveness in their services to the public. In addition, these organizations have the aim of enhancing government instantiation services to the public in order to develop and increase general and intellectual wellbeing. They also have flexibility in controlling management finance based on economic principles and productivity by implementing healthy business practices in Indonesia. The institution offers a variety of courses including Bachelor/Diploma

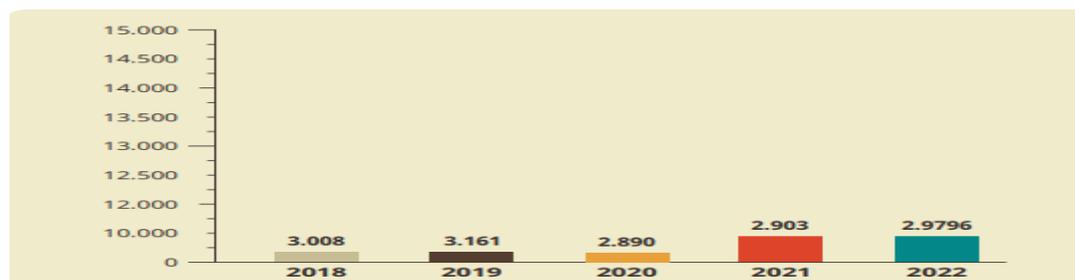
degree courses, non-diplomatic degree courses, course updates and upgrades, and short course training (Amiruddin, 2022). Based on the statistical report provided by the Centre for Human Resources Development on Sea Transportation, the overall count of individuals who obtained Bachelor/Diploma degrees in the year 2020 amounted to 2,890. Subsequently, in 2021, the number of graduates increased to 2,903, and in 2022, the figure further rose to 2,976. Over the past three years, there has been a 2.52% increase in the overall number of individuals who have obtained a Bachelor/Diploma degree (Amiruddin, 2022). Figure 3 and Table 1 show further elaboration on this information.

Table 1. *The total number of Bachelor/Diploma Degree Graduates from Indonesia's public maritime institutions in 2018-2022*

NO	SATKER	2018		2019		2020		2021		2022	
		L	P	L	P	L	P	L	P	L	P
1	STIP	461	29	395	13	384	51	294	33	387	82
2	PIP SEMARANG	367	43	444	10	409	51	271	27	327	49
3	PIP MAKASSAR	495	18	419	2	468	41	436	46	584	84
4	POLTEKPEL SURABAYA	489	17	410	19	253	16	389	34	320	25
5	POLTEKPEL SUMBAR	-	-	48	-	11	-	-	-	160	28
6	POLTEKPEL BAROMBONG	400	5	459	5	570	16	512	-	307	42
7	POLTEKPEL BANTEN	135	-	506	-	329	22	393	8	234	7
8	POLTEKPEL SORONG	164	-	177	-	111	20	151	-	96	19
9	POLTEKPEL MALAHAYATI	298	28	165	9	124	14	241	-	147	4
10	POLTEKPEL SULUT	59	-	80	-	-	-	67	-	74	-
JUMLAH TOTAL		2.868	140	3.103	58	2.659	231	2.754	148	2.636	340
		3.008		3.161		2.890		2.903		2.976	

Note. Adapted From Statistics report: Center of human resources development on sea transportation. (2022).

Figure 3. *The total number of Bachelor/Diploma Degree Graduates from Indonesia's public maritime institutions in 2018-2022*



Note. Adapted From Statistics report: Center of human resources development on sea transportation. (2022).

Based on the performance report provided by the Agency of Human Resources Development on Transport, the cumulative count of individuals who obtained Bachelor/Diploma degrees between 2020 and 2022 amounted to 9,472 graduates,

among these graduates, 6,796 graduates (71.75%) were employed in both domestic and international contexts. Nevertheless, a total of 2,676 graduates, accounting for (28.25%) of the sample, remain unemployed (Sasono, 2023b).

Similar findings were made by data from the Ministry of Transportation of Indonesia's largest and oldest public maritime institution, there were 81 diploma degree holders from higher maritime education in Jakarta in 2022; of these, 11 (13,58%) had worked at the national level, 13 (16,05%) at the international level, and the remaining 57 (70,37%) were unemployed (Fahmi, 2022). According to the aforementioned claim, no more than 16,05% of Indonesians with diplomas have held positions at the international level. In addition, recently, the Center of Human Resources Development on Transportation Indonesia has cooperated and coordinated with the Ministry of Maritime and Investment. Indonesia has ordered 6 six training vessel that has size of 1200 GT. These training vessel are given to six maritime institutions under Human Resources Development Agency of the Ministry of Transportation, namely : The Higher Education Maritime Jakarta (STIP Jakarta), Surabaya Maritime Polytechnics, Makassar Maritime Polytechnics, Malahayati Maritime Polytechnics, Sulawesi Utara Maritime Polytechnics, and Sorong Maritime Polytechnics. These training vessels were used to all students of Indonesian maritime institutions in enhancing and developing their seafarer competence, which is obtained through practice lessons on training vessels (WIBISONO, 2020).

2.2.2 Maritime Education Training Institutions' (METI) Challenges in Facilitating International Job Opportunities

Based on the seafarers workforce report for 2021 by the Baltic International Maritime Council (BIMCO)/the International Chamber of Shipping (ICS), it has been projected that there is now a shortfall of about 26,640 officers and a surplus of 37,640 ratings in the supply and demand for seafarers, this kind of information was outlined according to Table 2 and Figure 4.

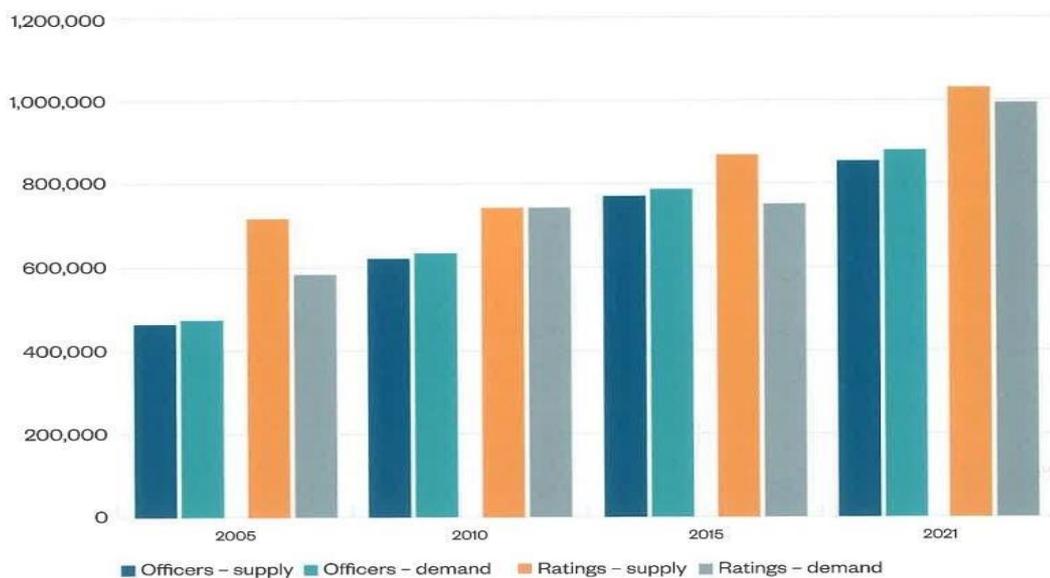
Table 2. Supply and Demand Balance Estimation 2005-2021

	Seafarers	2005	2010	2015	2021
Supply	Officers – supply	466,000	624,000	774,000	857,540
	Ratings – supply	721,000	747,000	873,500	1,035,180
	Total – supply	1,187,000	1,371,000	1,647,500	1,892,720
Demand	Officers – demand	476,000	637,000	790,500	883,780
	Ratings – demand	586,000	747,000	754,500	997,540
	Total – demand	1,062,000	1,384,000	1,545,000	1,881,320
Balance	Officers (shortage)	-10,000	-13,000	-16,500	-26,240
	Ratings (surplus)	135,000	0	119,000	37,640

Note. Adapted From the International Shipping Federation (ISF) and Baltic International Maritime Council (BIMCO). (2021). *Seafarer Workforce Report*. London.

Based on data retention of the projected worldwide availability of seafarers from 2010 to 2021, Indonesia ranks as the fifth largest country in terms of officer-level personnel and the third largest for rating-level personnel. According to the data collected from a questionnaire conducted by shipping companies in 2021, Indonesia is not among the top five nationalities of STCW seafarers working at the officer level in global merchant fleets (BIMCO, 2021). Therefore, Indonesian seafarers particularly at the officer level must be able to enhance their competence in order to compete and contribute to world merchant shipping fleets.

Figure 4. Supply and Demand Balance Estimation 2005-2021



Note. Adapted From the International Shipping Federation (ISF) and Baltic International Maritime Council (BIMCO). (2021). *Seafarer Workforce Report*, London.

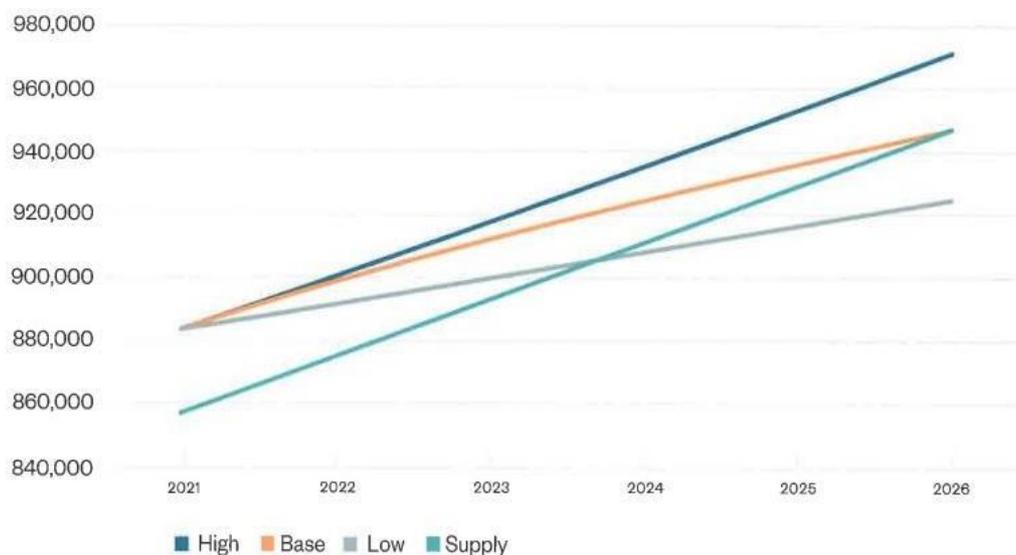
As stated before, Indonesia ranks fifth among nations that supply seafarers at the officer level. Due to this situation, Indonesia has a significant opportunity to catch up and potentially rank among the top five nationalities of STCW-certified seafarers employed at the officer level in global merchant shipping fleets. This is because, based on data regarding projected seafarer demand in 2026, the global shipping industries will need about 947,050 officers, meaning that up until that point, there will be a need for officer-level workers at a rate of 17,902 annually. Table 3 and Figure 5 will list the previously mentioned.

Table 3. Basic projection of seafarers future demand 2026

	Officers	Ratings
Demand in 2026	947,050	1,069,500
Annual supply growth needed	17,902	6,866
Average annual % increase needed	2%	0.6%

Note. Adapted From the International Shipping Federation (ISF) and Baltic International Maritime Council (BIMCO). (2021). *Seafarer Workforce Report*, London.

Figure 5. Baseline demand estimates for officers from 2021 to 2026



Note. Adapted From the *International Shipping Federation (ISF) and Baltic International Maritime Council (BIMCO)*. (2021). *Seafarer Workforce Report*, London.

The opportunities for Indonesia's seafarers to be employed by international shipping fleets are influenced by the role of the International Transport Workers' Federation (ITF). The ITF acts as a representative in various maritime industries, developing labor rights strategies in alignment with the International Labour Organization (ILO) standards. These strategies are implemented through the Collective Bargaining Agreement (CBA) and local-level worksite inspection processes conducted by ITF inspectors in every member country of the ILO. This implementation would be performed by dual parties' agreement between shipowners and labour standard inspection in every port. Furthermore, these agreements were validated and approved by the governments concerned, which as defined by three parties of the ILO (Thomas, 2011). Currently, the International Maritime Employer's Council (IMEC) strives hard to provide and facilitate sustainable crewing solutions for its members. The IMEC recruitment and training committee, which was established in 2006, consists of the representatives of IMEC members who voluntarily give their experience and knowledge to guide future maritime education and training, so that the International Maritime Employer's Council has opened opportunities to every maritime institution in the world to cooperate with them in providing sustainable crewing solutions to their members of shipowners (Lillie, 2008) In this case, it has been proved by one of the Indonesian maritime institutions, namely the Higher Education Training Jakarta, which has been an IMEC member since 2024. This kind of information is found in Figure 6.

Figure 6. Full list of International Maritime Employer's Council (IMEC)

Member Name	Region	Based In	Type	Date
MPP Carriers	EMEA	Greece	Full	2024
Oceanwaves International Corp	EMEA	Greece	Full	2024
Rocktree Logistics PTE Ltd	APAC	Singapore	Full	2024
Qingdao Agricore Ship Management Co., Ltd	APAC	China	Full	2024
Sekolah Tinggi Ilmu Pelayaran (STIP)	APAC	Indonesia	Associate	2024
Seastar Chartering Ltd	EMEA	Greece	Full	2024
UHL Crewing GmbH	EMEA	Germany	Full	2024
Sirios Shipmanagement Corp	EMEA	Greece	Full	2024
Navilands (Shanghai) Container Management Co., Ltd.	APAC	China	Full	2024
Navilands (Shanghai) Bulker Management Co., Ltd.	APAC	China	Full	2024
Navilands Container Management Ltd	EMEA	Greece	Full	2024
Navilands Bulker Management Ltd	EMEA	Greece	Full	2024
Sima Marine (India) Pvt Ltd.	APAC	India	Full	2024
Helikon Shipping Enterprises Ltd	EMEA	United Kingdom	Full	2024

Note. Adapted From the International Maritime Employer's Council Website.

Additionally, MSC.1/Circ.1163/Rev.13 gives a list of STCW parties that have communicated information demonstrating they are giving full and complete effect to the relevant provision of the STCW 1978 Convention as amended. Which means that in principle all certificates that have been issued by all member states included in the list of annex as the basis for the endorsement attesting recognition of certificates based on the requirement of the regulation I/10 STCW 1978 as amended. Pursuant to regulation I/10 paragraph one of STCW 1978 as amended, a party that recognizes

certificates and the party that has issued the certificates to be recognized must have a written undertaking agreed upon by both parties. Prior to agreeing to this written undertaking, the party that recognizes certificates will visit the facilities, observe the procedures, and review all requirements required by STCW 1978 as amended, such as standard competence and training, the issues of certificates, endorsement, and revalidation, in addition to, record keeping, and medical standards.

2.3 English Language Proficiency for Graduates of Maritime Education Training Institutions (METI)

The English language has been recognized as a global language and is widely taught worldwide. The fourth indication of the current usage of the English language is globalization and revolution. Possessing proficient English language skills among students might facilitate their access to international employment prospects, since the contemporary labor market necessitates individuals to possess a high level of proficiency and fluency in the English language (Hashim et al., 2020) As per the 2010 amendment to the International Regulation of Standard Training Certificate and Watchkeeping (STCW), all graduates of maritime education training (MET) are required to possess proficient English skills. Furthermore, as stipulated in the revised 2010 curriculum of the Standard Training Certificate and Watchkeeping (STCW), students pursuing Maritime Education Training (MET) are required to possess adequate written and oral proficiency. This proficiency is particularly crucial for comprehending chart navigation, various nautical publications, meteorological data, safety protocols, ship operations, and effective communication with other vessels and coast stations. This law establishes the minimum level of English proficiency required for all students and graduates of Maritime Education Training (MET) worldwide, thereby impacting their future international employment prospects (Dirgayasa, 2014).

Sufficient English maritime skills are needed by officers onboard vessels in using publications to conduct the duties as deck and engine officers onboard vessels as the mandatory requirement in Standard Training Certification and Watchkeeping (STCW) as amended STCW 2010 in accordance with A-II/1-2.5 III/1-2.3 and code II/1 2 Table a-II/1 A-II/4 for operation and management level (Baş et al., 2002).

2.4 The Role of Quality Control Mechanism in Maritime Education Training (MET) Systems

The Quality Standards System (QSS) operates according to the minimum requirements outlined in the International Convention on Standard Training Certification and Watchkeeping (STCW) 1978, as amended. This requirement applies to all member states of the International Maritime Organization (IMO) (ISO, 2007). Every member state of the International Maritime Organization must have the ability to guarantee that a globally recognized level of expertise in education and training is attained and clearly outlined, in accordance with the knowledge, comprehension, and proficiency required by the amended STCW 1978, specifically in Regulation I/8 concerning the Quality Standard System (Heinonen, 2021) In this case, to ensure those of competence have fulfilled International standard competence as required by STCW 1978 as amended, every member state was audited periodically by the International Member State Audit Scheme (IMSAS) to ensure compliance with the implementation of the current convention. Eventually, every member state shall be evaluated by independent evaluation for no more than 5-year intervals, with the independent evaluation reports communicated to the Secretary-General of IMO. The Secretary-General would then assign the Maritime Safety Committee to communicate with and process the member state in question, in order to determine if they should remain on the so-called whitelist of member states of IMO (Khalid et al., 2012).

Chapter 3: Research Methodology and Methods

This chapter presents a methodological framework for comparing two countries, specifically Indonesia and the Philippines. This framework was crucial for collecting, analyzing, and interpreting data using a mixed-method approach, which combines interviews and questionnaires. This chapter concentrated on the study objectives indicated in Chapter 1, which encompass several topics as follows:

- The main reasons why the diploma degree-graduates of the Maritime Education Training (MET) systems in Indonesia find it difficult to obtain comprehensive employment possibilities in the international shipping fleet.
- The policy framework and recommended strategies that could help enhance access to international job opportunities for Bachelor/Diploma Degree Graduates of Maritime Education Training (MET) in Indonesia.

3.1. Research Design

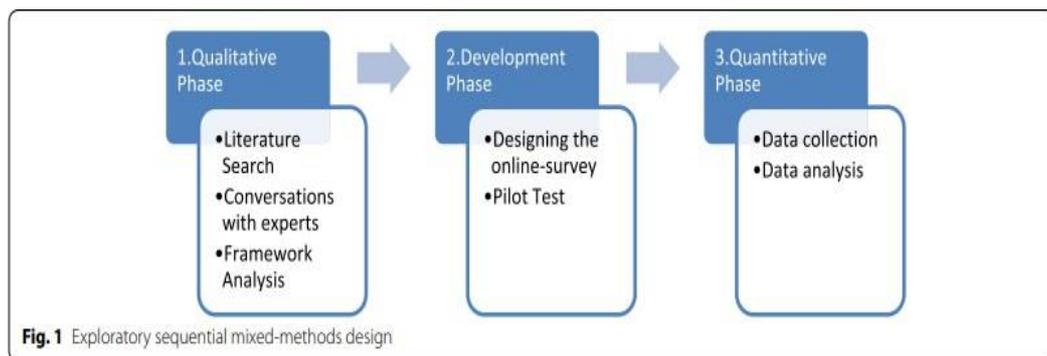
This study has used a mixed-methods approach, which is characterized as a research methodology that integrates at least one component of qualitative data with one component of quantitative data (Rudd & Johnson, 2013). This study used one type of mixed method research design, namely exploratory mixed method research design. This kind of research design has the characteristic that the first method that is conducted is the qualitative method. The result of this method can support the development of the second method, namely the quantitative method. (Greene et al., 1989). Another finding related to the exploratory design is that the intake and development of the questionnaire questions were supported by the combination of the qualitative analysis method and review documents (Wess et al., 2022). Typically, it takes three stages.

1. First phase

During this phase, certain pertinent aspects were discovered in the framework analysis based on a mix of information from the Chapter II literature study and the outcomes of the interview with a few respondents (experts) (Wess et al., 2022);

2. Phase two: To reinforce the findings from the qualitative phase and the pilot test protocols, the researcher administered an online survey during this phase (Wess et al., 2022);
3. The Third Phase
 In this type of phase, the findings from phase two were developed and suggested for the quantitative phase. The findings and recommendations of this research would then be examined and debated using a combination of data from a literature review and the results of the questionnaire process (Wess et al., 2022). Those statements are described in Figure 7.

Figure 7. *Exploratory Sequential Mixed-Methods Design*

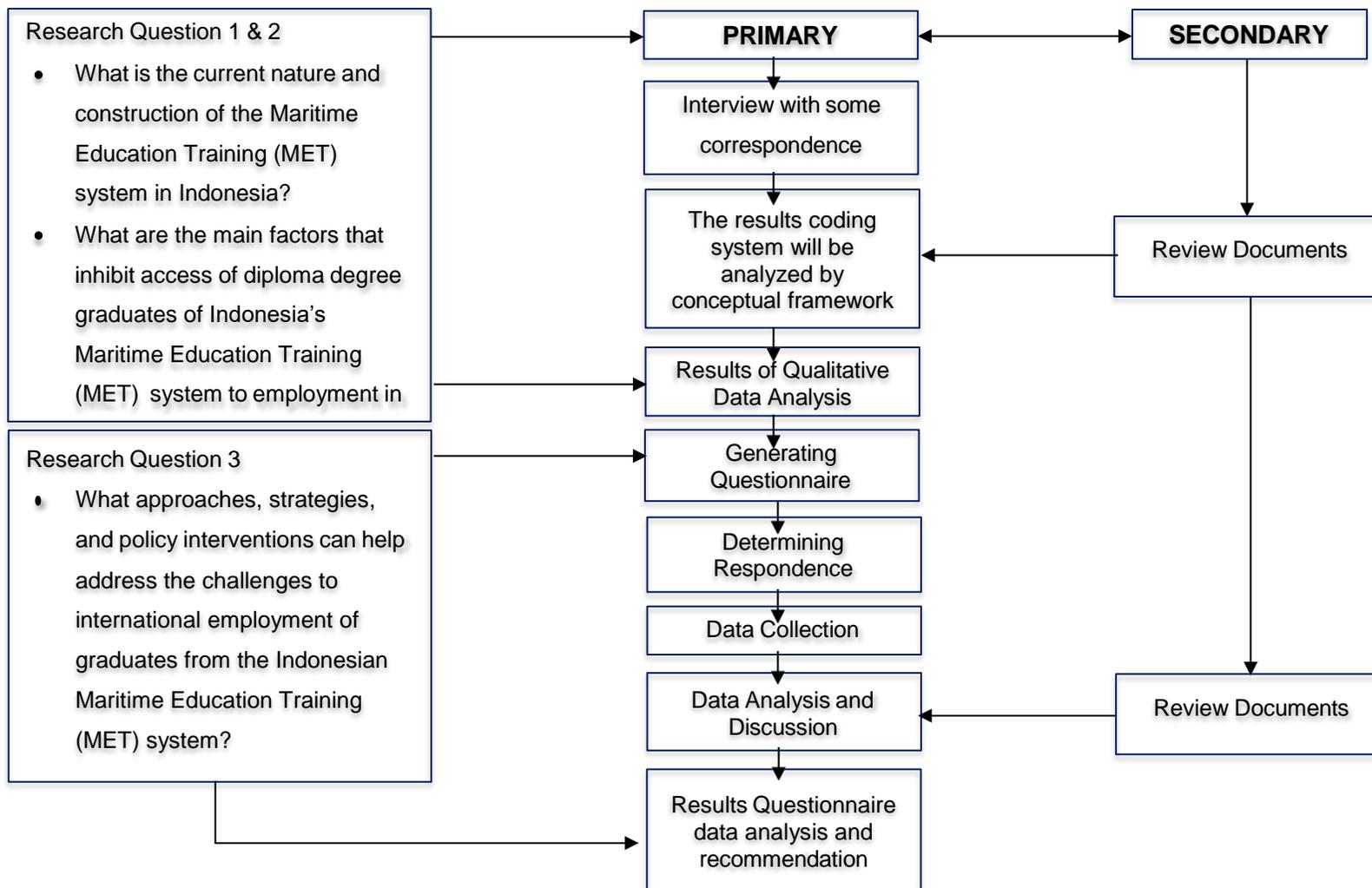


Note. Adapted From BMC Health Services Research. (2022). *An exploratory sequential mixed-methods study design.*

Based on the aforementioned mixed-methods research design, a new framework of mixed-methods research was developed, which aims to address and cover all research questions. This kind of mixed-methods research begins with addressing and covering research questions 1 and 2 of this research. In this case, 16 respondents that are from the different maritime organization in Indonesia and the Philippines was interviewed. The interview process was analysed by thematic analyses using the Delve application software utilizing the deductive coding system. The result of thematic analysis/coding system, which later was analysed into the conceptual framework and supported by reviewing documents until the result of qualitative data analysis is obtained. This was used to address and cover the research question regarding the current nature and construction of the Maritime Education Training (MET) system in Indonesia (research question number 1) and the main factors that

inhibit access of diploma-degree graduates of Indonesia's Maritime Education Training (MET) system to employment in the International Shipping Fleet (research question number 2). Furthermore, some approaches and strategies were strengthened in the questionnaire process. This would be a recommendation/guidance to develop some questions in the questionnaire process. Furthermore, the questionnaire process will involve collecting data from 100 respondents from various maritime organizations in Indonesia and the Philippines. Descriptive statistical analysis will be conducted using Microsoft Excel, and supported by document reviews, to identify intervention policies compatible with the defined approaches and strategies. These policies will address the research question concerning the approaches, strategies, and intervention policies needed to tackle the challenges of international employment for Indonesian seafarer graduates (research question number 3) and provide recommendations on how to develop international job opportunities for Indonesian seafarers. This process is depicted in Figure 8.

Figure 8. Framework of Methodology



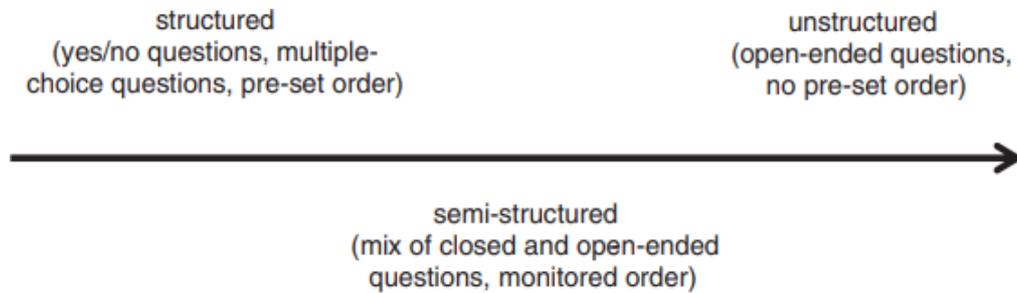
3.2 Instrumentation and Data Collection

The combination of qualitative and quantitative methodologies were used in the data collection process for this study, known as mixed-method data collection. With regard to the technique level, such as the level of data sampling, the level of data gathering, and the level of data analysis, this type of method seeks to broaden the scope of information and enhance the insight and research information (Sandelowski, 2000). The semi-structured interview combined with respondents, a few associated review documents, and a self-administered questionnaire serve as the main sources of data for this investigation.

3.2.1 Semi-Structured Interview

The semi-structured interview is defined as the one type of interview method that is between structured interview and unstructured interview. This means that the semi-structural interview must not always follow the pre-set order in covering all topics of research. This kind of method utilized the mixed close and open-ended question proposed to participants, which means that the researcher asked spontaneously question that are not in the context of the interview if he found the new dimension and insight during interview process. In addition, semi-structured interviews are mostly based on open-ended interview methods that encourage the participants to develop their insight and ideas to have depth. In addition, the participants would be capable of expressing their perspective, experience, and knowledge towards the defined subject matter of research using their own words, despite sometimes the yes/no question (close-ended question) are proposed. However, those questions have to be followed by open-ended questions that strive hard to acquire further information stated in the clarification, justification, elaborations, exemplification, and illustration forms (Karatsareas, 2022). The semi-structured interview statement mentioned above is explained in Figure 9.

Figure 9. *Continuum of Structuredness*



Note. Adapted From Karatsareas (2022). *Semi-Structured Interview*. Cambridge University Press, 37.

Semi-structured interviews were conducted with 16 predetermined participants from this study, including the following examples of Respondents:

1. A delegate from Indonesia's maritime institution;
2. A delegate from the Philippines' maritime institution;
3. Four people of a delegate from Indonesia's diploma degree student;
4. Two people of a delegate from the Philippines' diploma degree student;
5. Three people of a delegate from Indonesia's diploma degree graduate;
6. A delegate from Indonesia's maritime administration;
7. A delegate from the Philippines' maritime administration;
8. A delegate from Indonesia's seafarer community;
9. A delegate from the Philippines' seafarer community;
10. A delegate from the Indonesia International crew manning agency

The question at hand pertains to the involvement of maritime administration, maritime institutions, the seafarer community, and international crew manning agencies in advancing employment opportunities for Indonesian seafarers in the international shipping fleets. The interview process was performed using the Zoom application. Some evidence data collected from participants encompasses the following examples for instance: Zoom Video recording, Photos, and Signature of the consent form. The interview process was conducted by each respondent lasting no more than 2 hours. Furthermore, the interview process was conducted using a combination of deductive and inductive coding systems.

3.2.2 Questionnaire Surveys

Closed-ended questions were used in the research's data collection questionnaire. It was described as a data collection questionnaire that limits the respondent's ability to answer questions based on the options provided by the researcher. In other words, the respondent is not free to freely express their opinions or provide a response without being swayed by the researcher through one of the provided questions (Reja et al., 2003). One hundred (100) respondents completed online evaluations as part of the questionnaire data-gathering process. For example:

1. Twenty representatives of the maritime administration;
2. Twenty representatives of the Maritime Education Training (MET);
3. Twenty representatives of the diploma-degree students;
4. Twenty representatives of the Seafarers Union;
5. Ten representatives of the International Crew Manning Agency;
6. Ten representatives of the Bachelor/Diploma Degree Graduates.

Data collection was conducted via a Google document, with the aim of organizing all questionnaire questions that were distributed to the designated respondents. A portion of the questionnaire questions is derived from the results of pertinent data that was analyzed using a conceptual framework and supported by review documents.

3.3 Data Analyses

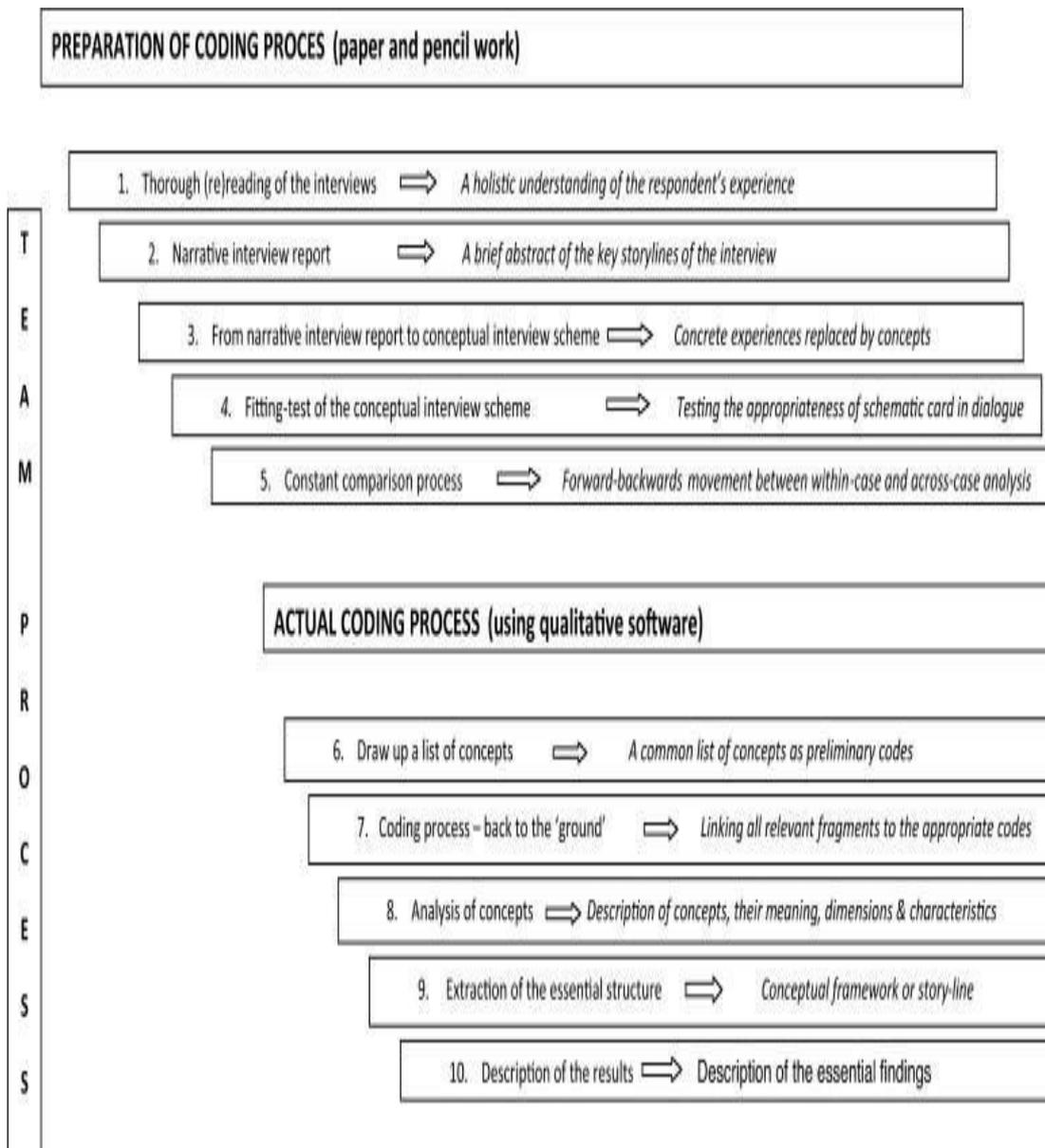
This data analysis utilized mixed data, which was defined as data employed to analyze mixed research involving both qualitative and quantitative techniques within the same study. Additionally, in supporting mixed research, this type of analysis encompassed an inclusive framework functioning to interlink qualitative and quantitative data analyses. (Onwuegbuzie & Combs, 2011).

3.3.1 Qualitative Data Analysis

Qualitative data analysis refers to the process of collecting and analyzing relevant data obtained through interviews, literature reviews, and review documents. To conduct qualitative data analysis, a coding system was used derived from the research data obtained through the interview process (Caudle, 2004) Additionally, the process was based on a theory analysis associated with The Qualitative Analysis

Guide of Leuven (QUAGOL). This process used a comprehensive method in elaborating the qualitative data analysis (De Casterlé et al., 2012a). All the aforementioned descriptions on the qualitative analysis guide of Leuven (QUAGOL) were presented in Figure 10.

Figure 10. *Qualitative Analysis Guide of Leuven (QUAGOL)*



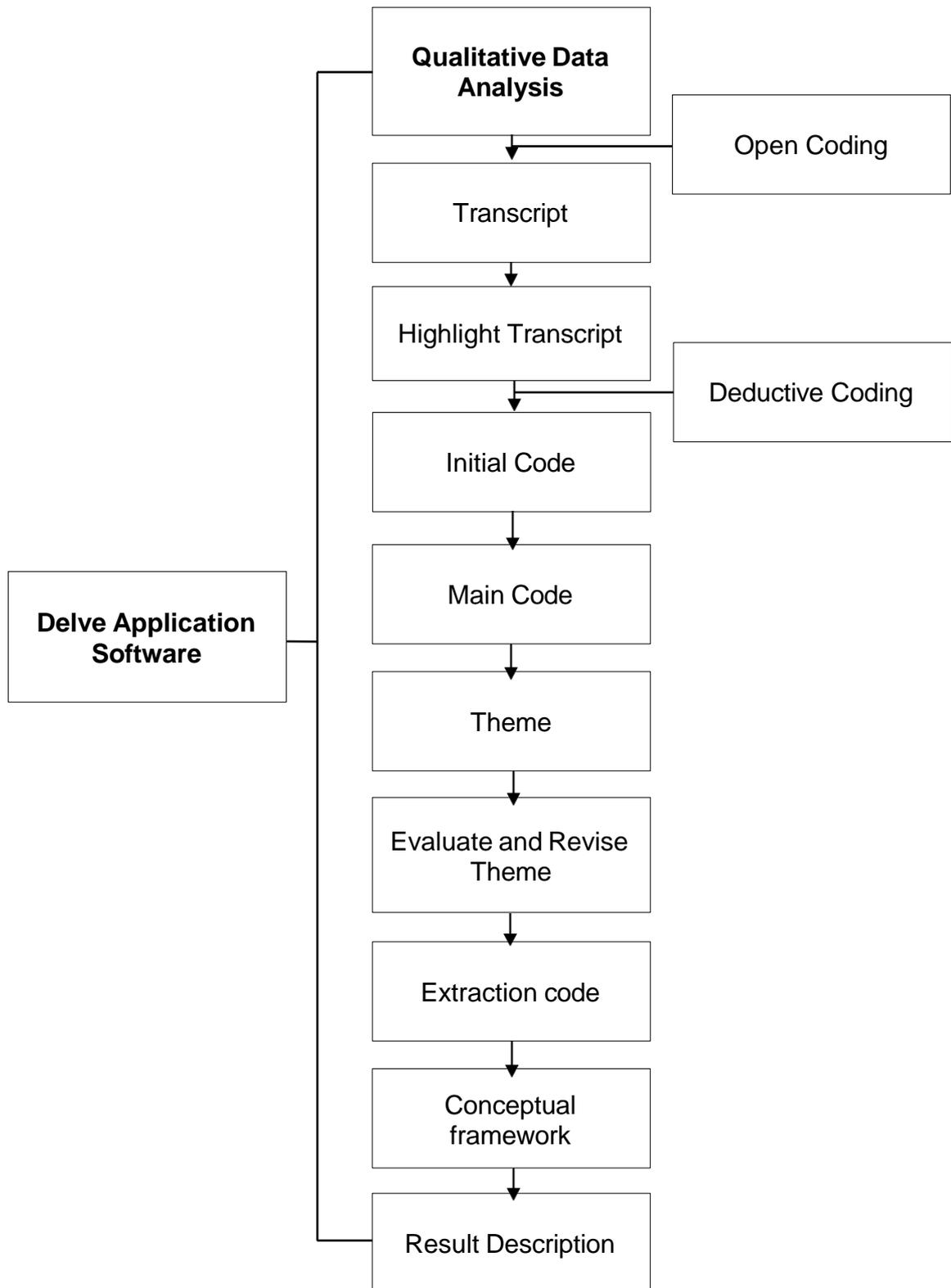
Note. Adapted From De Casterle, B.D., Gastman, C., Bryon, E., Denier, Y. (2012). *Stages of The Qualitative Analysis Guide of Leuven*. *International Journal*, 37, 360-371.

According to The Qualitative Analysis Guide of Leuven (QUAGOL), the qualitative data using thematic analysis utilizing the Delve application software, it was performed through the following steps:

1. Transcript: The entire interview report was recorded derived from respondents completed in this section, and the key storyline of the interview was shortened;
2. Highlight Transcript: Attention was drawn to the section of the interview report that is deemed to be the most important portion of the report in this section, and then a few essential points from the interview report in this section was highlighted;
3. Set Initial Code, In this step all essential points were set by initial code, and it was put into the Delve application software;
4. Main Code: Using the exploratory research methodology and the research question as a guide, a main code was created in this section. The main code was split into six codes in this instance: the current nature and Construction, Causative factor, Approach, Strategy, Challenge, and Inhibitor;
5. Theme: Based on the aforementioned main codes, all main codes were classified to be included into two main codes namely the Driving Factor and Barrier Factor;
6. Evaluate and revise theme: In this step, the researcher made sure that there are no similarities between one theme and another. If similarities are found, it must be evaluated and revised, which means it was incorporated between one theme and another;
7. Extraction of the essential structure: Furthermore, after the coding process is finished, all coding systems were described by using conceptual framework analyses, which outlined from theme up to main code;
8. Analyses and Data Result: After all results of thematic analysis/coding data have been extracted, based on conceptual framework all data were analysed and supported by review documents, until the result of qualitative data analyses were obtained.

The aforementioned process is shown in Figure 11.

Figure 11. *Qualitative Data Analysis*



Furthermore, results of qualitative data analysis were used to address and cover research questions regarding the current nature and construction of the Maritime Education (MET) system in Indonesia (Research Question number 1). The main factors that inhibit access to international employment of graduates from maritime education training (MET) system leading to employment in the international shipping fleets (Research Question number 2) were analysed. Approaches and strategies aimed at addressing the challenges of international employment for Indonesian seafarer graduates were reinforced through the questionnaire process, which also provided recommendations and guidance for developing questions within the questionnaire process itself.

3.3.2 Quantitative Data Analysis

Quantitative data analysis refers to the systematic process of analyzing numerical data in research, which involves employing certain logical reasoning and deductive methods (Khalid et al., 2012). Additionally, a standard research design is needed for the data from the quantitative analysis. The goal of this type of analysis is to better understand how to define, explain, and forecast occurrences through the use of probability sampling and larger sample sizes than those used in qualitative design study (MUTETI, 2009).

In this quantitative data analysis process, the researcher employed "Descriptive Statistics," defined as the statistical method capable of providing a means of describing the numerical data collected through research, which was subsequently assimilated by readers. It is possible that the result of the research was used in practice based on the evidence that was found, which in turn was used to address the gap between theory and practice. This kind of statistical method is extremely suitable for compiling and inferring quantitative data sets (Marshall & Jonker, 2010). In this instance, the researcher's concerns in carrying out this quantitative data analysis would be the following:

1. Define the Research Questions

In this step, a few question-based research approaches and strategies derived from the qualitative data analysis, were identified and divided into approach and strategies questions;

2. Decide Upon Method

In this step, the methodology for the quantitative data analysis was chosen using the “Descriptive Statistics analysis”. In this case, all approaches and strategies that have been obtained through the qualitative data analysis process, which later would be recommendations and guidance in developing some questionnaire question. These were disseminated to some respondents to get agreement from the respondents towards approaches and strategies found from qualitative data analysis;

3. Collect Data

In this stage, information was gathered by distributing the questionnaire to one hundred (100) participants. This step involves creating the questionnaire research questions using the Google Form Document Application;

4. Process and analyze data

In this case, analysis steps were conducted consisting of:

1. Divide research questions

The research question was divided into two parts: approaches, research questions, and strategies research questions;

2. Compile all research questions into the excel table

All research questions were compiled into an Excel table based on the research questions and answers of the respondents;

3. Account Mode of respondents

The percentage of respondents’ answer Strongly Agree, Agree, Disagree, Strongly Disagree, and Not Sure from each of the research questions were accounted for;

4. Account Mean of percentage respondents

The mean of respondents’ percentage who answers of strongly agree, agree, not sure, disagree, strongly disagree were accounted for, until the result are obtained. Which later was analysed and supported by literature review of Chapter II and the review documents until obtaining some intervention policies that are compatible with defined approaches and strategies, which can help address the challenges to international employment of graduates from the Indonesian Maritime Education Training (MET) system;

5. Evaluation Result

In this section, the final outcome of the quantitative data analysis research was evaluated by determining the final hypotheses. The final results of the quantitative data analysis research were evaluated based on data obtained from the mean percentage of respondents who answered strongly agree, agree, not sure, disagree, and strongly disagree.

3.4 Ethical Issues

The ethical difficulties pertain to the regulations and protocols adhered to by the researcher prior to engaging human subjects. Prior to gathering any data, the researcher must obtain consent from the WMU Research Ethics Committee (REC) and their respective supervisors. According to the committee's approval, the data of the privacy participant that is acquired would be safeguarded and erased once the graduation date is determined. The researcher used questionnaires and interviews to first gather participant data for this study. After that, the participant and the researcher agree on the use of some of the obtained participant data for the participant's dissertation, which later would be made public and available online in WMU's digital repository (maritime common). Furthermore, the researcher persuaded the participants that the research is anonymous, i.e., that the consent form from the interview and questionnaire, which served as proof of the research, would not contain the participant's personal information or those with their consent.

Chapter 4: Findings and Analysis

In this chapter, the findings and analysis of the qualitative and quantitative data research were presented. This was accomplished after gathering data through the interview process from 16 respondents representing Maritime Education and Training (MET), Diploma Degree Students, Bachelor/Diploma Degree Graduates, Maritime Administration, Seafarers Union, and International Crew Manning Agency. All interview data were analyzed through thematic analysis using the Delve Application Software. Questionnaires were also employed, yielding 100 respondents from various organizations and countries. Descriptive Statistics, utilizing Microsoft Excel, was applied for quantitative analysis.

4.1 Finding and Analysis of Qualitative Data

In this thematic analysis process, two themes namely the barrier factors and the driving factors were chosen. Barrier factors were those which inhibited access of Bachelor/Diploma Degree graduates to employment in the international shipping fleets. Driving factors were also found. These are factors that help the development of international job opportunities for Indonesian seafarers. Both sets of factors are described in Table 4.

Table 4. *Description of Theme Research*

Remarks	Theme
Name of theme	Barrier Factors (T1)
Description	The factors that inhibit access of Bachelor/Diploma Degree Graduates to to employment in international shipping fleets
Remarks	Theme
Name of theme	Driving Factors (T2)
Description	The factors that can be utilized to develop international job opportunities for Indonesian seafarers

4.1.1 Barrier Factors Theme

The researcher has determined the first theme in the thematic analysis that was performed using the Delve Application Software. In this barrier factor, there would be two sub-themes or main codes, namely, the causative and the inhibitor. In this case, the researcher took a look in depth regarding the causative that was defined as the factor that causes why Bachelor/Diploma Degree Graduates to have difficulty competing at the international level and the inhibitor that must be addressed because this factor will inhibit access to Bachelor/Diploma Degree Graduates to employed in the international shipping fleets. These descriptions regarding the interconnection between the first theme and sub-theme/main codes are described in Table 5.

Table 5. *Description of First Theme Research*

Remarks	Barrier Factors (T1)
Sub-Theme	Causative (ST1)
Description	The factors that explain why Bachelor/Diploma Degree Graduates find it difficult to compete at the international level
Remarks	Barrier Factors (T1)
Name of theme	Inhibiting Factors (ST2)
Description	The factors that can inhibit access of Bachelor/Bachelor/Diploma Degree Graduates to employment in the international shipping fleets

Additionally, the researcher took a look at barrier factors to answer the research question regarding the main factor of inhibiting access of Bachelor/Diploma Degree Graduates to employment in the International Shipping Fleet, this process was described in Figure 12.

Figure 12. *The Barrier Factors Theme of qualitative data*

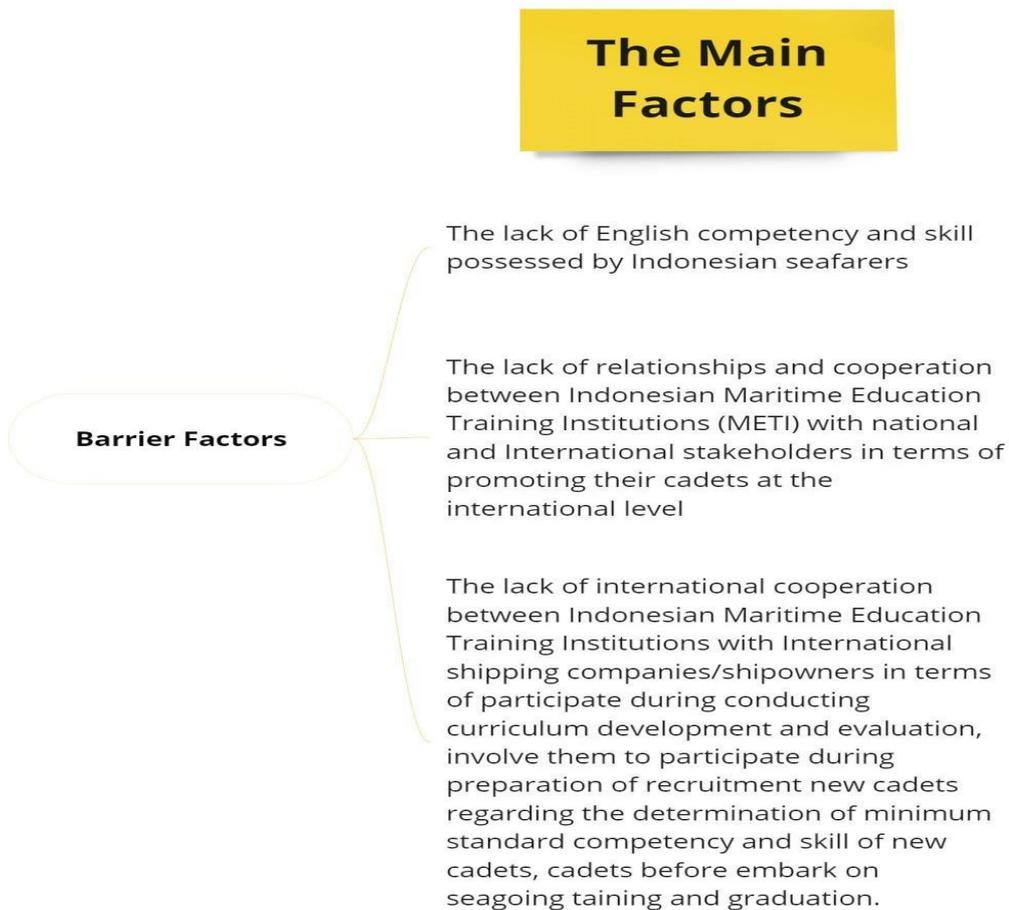


Figure 12 describes the main factors inhibiting access of Bachelor/Diploma Degree graduates to employment in the international shipping fleet. These were obtained from arguments and opinions stated by representatives from international crew manning agencies, Indonesian Bachelor/Diploma Degree students and graduates, Indonesian Seafarers Unions, and Indonesian Maritime Administration. Examples of such statements are the following:

“One factor that we have to consider is the lack of English competency. Sometimes Indonesian seafarers underestimate a situation; they really confidently relate their experience to the national level only, whereas they don’t

care about English competency, so they can't pass the interview test using the English language." – CMA7;

"There is no obligation for every employee in our maritime institutions to use the English language." -IST7;

"I am still not confident enough to compete at the international level because I am not confident in my English competency skills, but at the national level, I am really confident because I have good enough competence and skills to compete with the national shipping companies." -IST 3;

"We have never conducted the frequently conducted TOEFL test." -IMI16;

"The English competency is not a requirement to recruit the candidate of cadets, so we don't have particular standard English competencies that are used in the recruitment process."-IMI13.

Regarding the lack of relationships and cooperation between Indonesian Maritime Education Training Institutions (METI) with national and international stakeholders in terms of promoting their cadets at the international level. Arguments and opinions that were stated by the representatives from Indonesian Bachelor/Diploma Degree Graduates, Indonesian METI, and Indonesian Seafarers Unions include the following:

"We have tried applying our application to the one international crew manning agency; they always ask us about seagoing experience because we don't have it, so that's why we didn't have the opportunity to join their interview test." -IGR9;
"From 537 graduates, only 5% definitely joined the international shipping fleets."-IMI2;

"So far, we have never given Bachelor/Diploma Degree Graduates the opportunity to enhance their seagoing experience by participating as one of the crews in our training vessel, which has been changed to be the conventional vessel in the "TOL LAUT" program." -IMI21;

"Indeed, so far, we have known that Indonesia hasn't joined the International Association Maritime University (IAMU), which has the function of promoting maritime education and training globally." -IMI17;

"Yes, there is. Recently, we still found that international shipping companies that have a Collective Bargaining Agreement (CBA) with the Indonesia Seafarers Union haven't been affiliated with ITF, so when the concerned vessel got the

inspection from ITF and port state control (PSC), and then they have found Collective Bargaining Agreement (CBA) hasn't been approved and affiliated with the ITF agreement, therefore, its CBA has to be improved with the new CBA that was issued by the Indonesia Seafarers Union, which is affiliated with ITF". -ISU5;

"Currently, there are 4 Indonesian seafarers unions that aren't affiliated with the ITF (International Transport Federation), so Indonesia has 5 seafarers unions." -ISU2.

Arguments and opinions stated by representatives of International crew manning agencies, Indonesian Bachelor/Diploma Degree students and Indonesian METI concerning the lack of international cooperation between Indonesian Maritime Education Training Institutions and International shipping companies/crew manning agencies in terms of participating in curriculum development and evaluation, determination of minimum standard competency and skill of new cadets, before embarking on seagoing training and graduation, consist of:

"Honestly, we have never been involved in the curriculum development and evaluation process by public maritime institutions." -CMA6;

"We have never gotten the training and workshop regarding how to apply my application to international shipping fleets." -IST8;

"During the recruitment process for cadets, the international shipping companies are not involved, but for some requirements related to health and cadets' physiology, we involve the international shipping fleets." -IMI7.

4.1.2 Driving Factors Theme

The researcher has determined the second theme in the thematic analysis, which was performed using the Delve Application Software. In this driving factor, there would be four sub-themes or main codes, consisting of Current Nature and Constructions, Challenges, Approaches, and Strategies. These descriptions were described in Table 6.

Table 6. *Description of Second Theme Research*

Remarks	Driving Factors (T2)
Sub-Theme	Current Nature and Construction (ST3)
Description	the current nature and construction of Maritime education Training (MET) systems
Remarks	Driving Factors (T2)
Name of theme	Challenges (ST4)
Description	the challenges of Bachelor/Diploma Degree Graduates to compete at the international level
Remarks	Driving Factors (T2)
Sub-Theme	Approaches (ST5)
Description	The approach that must be conducted to develop international job opportunities for Indonesian seafarers
Remarks	Driving Factors (T2)
Sub-Theme	Strategies (ST6)
Description	the strategies how to solve the main factor of inhibiting access of diploma degree graduate's employment in international shipping fleets

Additionally, the researcher takes a look at driving factors to answer research questions regarding approaches and strategies that can help address challenges to international employment of graduates from Maritime Education Training (MET) systems. This process was described in Figure 13.

Figure 13. Driving factors of qualitative data

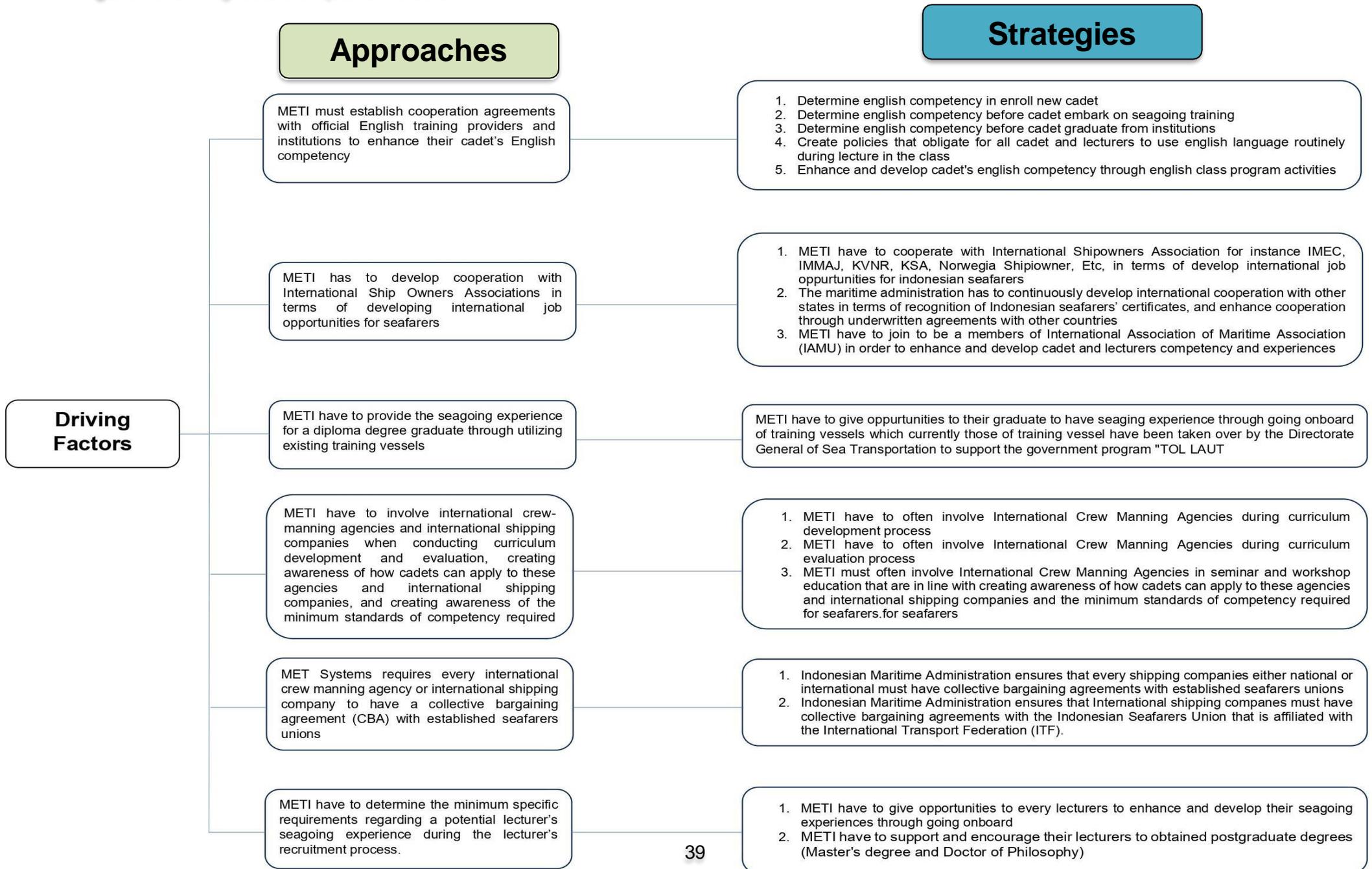


Figure 13 shows approaches and strategies that can help to address the challenges to international employment of graduates from the maritime education training (MET) systems. These of approach and strategy factors were obtained from arguments and opinions stated by representatives from the Philippine Bachelor/Diploma Degree Students, the Philippine and Indonesian METI, Philippine and Indonesian Maritime Administration, Indonesian Bachelor/Diploma Degree graduates, International Crew "Manning Agencies. They include the following:

"One aspect of our screening exams before they can enter our institution is basic English proficiency because inside the academy we have an English-only policy in our classroom instruction and working language." -PMI16;

"We have English proficiency based on the minimum level that is required by the shipping industry, like shipboard phrases and communication, and we have 9 English courses, and each of the courses has a general passing grade that has to be met by our cadets." -PMI17;

"We are very familiar with IAMU (International Association Maritime University); we have a very close relationship with this organization." -PMI19;

"For estimated, our institutions have cooperate with 50 international shipping companies; basically, we have 2 group international shipping companies that are sponsoring our cadets, namely IMMAJ (International Mariners Management Association of Japan) and IMEC (International Maritime Employers Council)." -PMI10;

"AMOSUP (Associated Marine Officers' Union of the Philippines), this is our father organization, has a good relationship with international shipping companies, so that it would be able to establish trust and encourage cooperation between our institution and international shipping companies." -PMI12;

"Yes, they did; our institution has determined the specific requirement regarding the lecturer's seagoing experiences at least 18 months for being an officer onboard at the operational level." -PMI8;

"There are two platforms in our institution to enhance and upgrade our competence; first we call it shipboard rotation; every lecturer enhances and upgrades their seagoing experience through the training vessel; and second we

have opportunities as a lecturer to upgrade and enhance our master degree and PhD program through sponsorship by AMOSUP (Associated Marine Officers' Union of the Philippines)." -PMI11;

"I think in our institutions in terms of developing international job opportunities is not a problem in my institution because mostly our cadets have been funded by international shipping companies." -PMI20;

"Currently, since initial 2024, those of the training vessel have been operated by three parties to support the "TOL LAUT" program, which is one of the Indonesian government programs, to become the conventional vessel; in this case, those of the training vessel have changed their vessel's status from training vessel to conventional vessel." -IMI20;

"After we graduate from our institutions, we must go back to our international shipping company, which means that we have a 100% guarantee to go back to our international shipping company after graduation." -PST4;

"Initially, the international shipping companies funded all our academy processes in my institutions until our graduation, and it would be continued to make a new agreement after we graduate up to 6-7 years going forward." -PST3;

"First and foremost, they have conducted Collective Bargaining Agreements with some international shipping companies; right now, the AMOSUP has conducted the Japan Seafarers Union; about ninety percent shipping companies have corporated with us; we have conducted CBAs with IMEC; we have CBAs with the Norwegian Shipowners Association; we also have CBAs with American Shipowners." -PSU5;

"Usually, we conduct a cadet service bond that depends on a policy from ownership; there would be some ownership funding in the last semester; in addition, there would be a policy from ownership when a cadet who has seagoing project experience comes back to our company; he would get 1500 USD and have opportunities to join with our shipping company." -CMA5;

"For seafarers members of AMOSUP, First and Foremost they have services like medical facilities for all seafarers families, the seafarers members have financial assistance like a loan and subsidy for the food and groceries, the members have free accommodation, the family member have a discount when

they want to take vacation to stay in the hostel/cottage, and provide the pension fund to the members." -PSU4;

"Currently, we already have 150 collective bargaining agreements with international shipping companies, in which this CBA has to be reported and approved by the concerned seafarers union to the International Transport Federation (ITF) and in turn consult with the seafarers union in the beneficial ownership country for the release negotiating group." -ISU4.

4.2 Finding and Analysis of Quantitative Data

As described in Chapter III, the findings from qualitative data analysis informed the development of questions used for the survey. The quantitative data analysis was implemented through "Descriptive Statistics" using Microsoft Excel. The sequenced steps that have to be considered in implementing this method consist of:

1. Identifying and separating questions related to approaches and strategies;
2. Identifying and accounting for how many respondents who responded to approaches and strategies questions;
3. Identifying and accounting for how many respondents percentage who responded to approaches and strategies questions;
4. Identify and account for the mean percentages of respondents who responded to the approaches and strategies questions.

4.2.1 Identifying and separating questions related to approaches and strategies

In this step, the researcher determined which one of the research questions includes approaches and which one includes strategies. In this case, approaches are more actions that involve other parties to support the organization's objectives in addressing the challenges to international employment of graduates of the MET system, and strategies are more actions that are conducted by the organization concerned without involving other parties in implementing the objectives. There would be nine questionnaire questions about approaches, which encompass:

1. Indonesian maritime education and training institutions must establish cooperation agreements with official English training providers and institutions to enhance their cadet's English competency (RQ5);

2. Indonesian maritime education and training institutions have to develop cooperation with international shipowners' associations in terms of developing international job opportunities for seafarers (RQ 6);
3. Indonesian maritime education and training institutions have to provide the seagoing experience for a diploma degree graduate through utilizing existing training vessels (RQ10);
4. Indonesian maritime education and training have to involve international crew-manning agencies and international shipping companies when developing the curriculum (RQ11);
5. Indonesian maritime education and training institutions have to involve international crew-manning agencies and international shipping companies in conducting curriculum evaluation processes (RQ 12);
6. Indonesian maritime education and training institutions have to cooperate with international crew manning agencies and international shipping companies, creating awareness of how cadets can apply to these agencies and international shipping companies (RQ 13);
7. Indonesian maritime education and training institutions have to cooperate with international crew manning agencies and international shipping companies in creating awareness of the minimum standards of competency required for seafarers (RQ 14);
8. The Indonesian maritime education and training system requires every international crew manning agency or international shipping company to have a collective bargaining agreement (CBA) with established seafarers unions (RQ 15);
9. The maritime administration, maritime education training, seafarers union, and other stakeholders in the shipping industry have to collaborate in terms of developing international job opportunities for seafarers (RQ19).

In addition, there would be 10 questionnaire questions about strategies that encompass:

1. Indonesian maritime education and training institutions must determine the English language competency of applicants when determining whether or not to enrol new cadets in MET institutions. (RQ1);

2. Indonesian maritime education and training institutions must determine the English standard competency that is achieved by cadets before they embark on seagoing training (RQ2);
3. Indonesian maritime education and training institutions must determine the English standard competency that is achieved by cadets before they graduate from the institution (RQ3);
4. The Indonesian maritime education and training system must create policies that make it mandatory for all cadets and lecturers to use the English language routinely (RQ4);
5. Indonesian maritime education and training institutions have to determine the minimum specific requirements regarding a potential lecturer's seagoing experience during the lecturer's recruitment process (RQ 7);
6. Indonesian maritime education and training institutions have to support and encourage their lecturers to acquire postgraduate degrees (Master's degree and Doctor of Philosophy) (RQ8);
7. Indonesian maritime education and training institutions have to provide opportunities for lecturers to enhance their seagoing experience through going onboard (RQ9);
8. The seafarer's union has to enhance and develop their services in terms of seafarer's protection and seafarer's welfare that are given to seafarer members (RQ 16);
9. The maritime administration has to continuously develop international cooperation with other states in terms of the recognition of Indonesian seafarers' certificates (RQ17);
10. International crew manning agencies and international shipping companies have to give opportunities to maritime degree graduates from Indonesia who do not have international seagoing experience but only have national seagoing experience to be employed as junior officers (RQ18);

4.2.2 Identifying and accounting for how many respondents who responded to approaches and strategies questions

In this section, the researcher explained that there were 147 valid responses that were obtained from:

1. Bachelor/Diploma degree students: 43 respondents;
2. Bachelor/Diploma Degree Graduates: 11 respondents;
3. Maritime Education Training Institutions (METI): 39 respondents;
4. Maritime Administration: 22 respondents;
5. Seafarers Unions: 20 respondents;
6. International Crew Manning Agencies: 12 respondents.

These responses exceed the defined target, namely 100 respondents, consisting of:

1. Bachelor/Diploma Degree Students: 20 respondents);
2. Bachelor/Diploma Degree Graduates: 10 respondents;
3. Maritime Education Training Institutions (METI): 20 respondents;
4. Maritime Administrations: 20 respondents;
5. Seafarers Unions: 20 respondents;
6. International Crew Manning Agencies: 10 respondents.

The quantitative data analysis was done using Microsoft Excel, and the following data concerning the results of responses from respondents to the number of approach questions were described in Table 7.

Table 7. *The result of responses to a number of Approach Questions*

Number	Question/Answer	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree	N
1	RQ5	88	33	11	8	7	147
2	RQ6	101	23	9	5	9	147
3	RQ10	94	26	9	8	10	147
4	RQ11	88	33	8	7	11	147
5	RQ12	88	30	11	9	9	147
6	RQ13	98	23	11	8	7	147
7	RQ14	97	23	12	7	8	147
8	RQ15	88	32	9	8	10	147
9	RQ19	100	23	11	5	8	147

The following data concerning the results from respondents to the number of strategy questions and answers were described in Table 8.

Table 8. *The result of responses to a number of strategy questions*

Number	Question/Answer	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree	N
1	RQ1	93	31	10	8	5	147
2	RQ2	92	31	10	7	7	147
3	RQ3	93	29	9	7	9	147
4	RQ4	89	32	11	7	8	147
5	RQ6	101	23	9	5	9	147
6	RQ7	92	33	8	6	8	147
7	RQ8	90	28	10	10	9	147
8	RQ9	94	28	13	4	8	147
9	RQ16	99	22	10	7	9	147
10	RQ17	95	28	11	4	9	147
11	RQ18	94	27	8	5	13	147

4.2.3 Identifying and accounting for how many respondents percentage who responded to approaches and strategies questions

In this section, based on the number of responses from respondents to questionnaire questions, the researcher indicated the percentage of responses to every answer (strongly agree, agree, not sure, disagree, strongly disagree) upon each of the questions. The following data concerning the percentage of responses to the number of approach questions were described in Table 9.

Table 9. *The percentage of responses to a number of approach Questions*

Approach			
Question and Answer	Response	Percentage	N
Indonesian maritime education and training institutions must establish cooperation agreements with official English training providers and institutions to enhance their cadet's English competency (RQ5)			
Strongly Agree	88	60%	147
Agree	33	22%	147
Not Sure	11	7%	147
Disagree	8	5%	147
Strongly Disagree	7	5%	147

Approach			
Question and Answer	Response	Percentage	N
Indonesian maritime education and training institutions have to develop cooperation with International Ship Owners Associations in terms of developing international job opportunities for seafarers (RQ 6)			
Strongly Agree	101	69%	147
Agree	23	16%	147
Not Sure	9	6%	147
Disagree	5	3%	147
Strongly Disagree	9	6%	147
Indonesian maritime education and training institutions have to provide the seagoing experience for a diploma degree graduate through utilizing existing training vessels (RQ10)			
Strongly Agree	94	64%	147
Agree	26	18%	147
Not Sure	9	6%	147
Disagree	8	5%	147
Strongly Disagree	10	7%	147
Indonesian maritime education and training have to involve international crew-manning agencies and international shipping companies when developing the curriculum (RQ11)			
Strongly Agree	88	60%	147
Agree	33	22%	147
Not Sure	8	5%	147
Disagree	7	5%	147
Strongly Disagree	11	7%	147
Indonesian maritime education and training institutions have to involve international crew-manning agencies and international shipping companies in conducting curriculum evaluation processes (RQ 12)			
Strongly Agree	88	60%	147
Agree	30	20%	147
Not Sure	11	7%	147
Disagree	9	6%	147
Strongly Disagree	9	6%	147
Indonesian maritime education and training institutions have to cooperate with international crew manning agencies and international shipping companies, creating awareness of how cadets can apply to these agencies and international shipping companies (RQ 13)			
Strongly Agree	98	67%	147
Agree	23	16%	147
Not Sure	11	7%	147
Disagree	8	5%	147
Strongly Disagree	7	5%	147
Indonesian maritime education and training institutions have to cooperate with international crew manning agencies and international shipping companies in creating awareness of the minimum standards of competency required for seafarers (RQ 14)			
Strongly Agree	97	66%	147

Approach			
Question and Answer	Response	Percentage	N
Agree	23	16%	147
Not Sure	12	8%	147
Disagree	7	5%	147
Strongly Disagree	8	5%	147
The Indonesian maritime education and training system requires every international crew manning agency or international shipping company to have a collective bargaining agreement (CBA) with established seafarers unions (RQ 15)			
Strongly Agree	88	60%	147
Agree	32	22%	147
Not Sure	9	6%	147
Disagree	8	5%	147
Strongly Disagree	10	7%	147
The maritime administration, maritime education training, seafarers union, and other stakeholders in the shipping industry have to collaborate in terms of developing international job opportunities for seafarers (RQ19)			
Strongly Agree	100	68%	147
Agree	23	16%	147
Not Sure	11	7%	147
Disagree	5	3%	147
Strongly Disagree	8	5%	147

The following data concerning the percentage of responses to the number of strategies were described in Table 10.

Table 10. *The percentage of responses to a number of strategies Questions*

Strategies			
Question and Answer	Response	Percentage	N
Indonesian maritime education and training institutions must determine the English language competency of applicants when determining whether or not to enrol new cadets in MET institutions (RQ1)			
Strongly Agree	93	63%	147
Agree	31	21%	147
Not Sure	10	7%	147
Disagree	8	5%	147
Strongly Disagree	5	3%	147
Indonesian maritime education and training institutions must determine the English standard competency that is achieved by cadets before they embark on seagoing training (RQ2)			
Strongly Agree	92	63%	147
Agree	31	21%	147
Not Sure	10	7%	147

Strategies			
Question and Answer	Response	Percentage	N
Disagree	7	5%	147
Strongly Disagree	7	5%	147
Indonesian maritime education and training institutions must determine the English standard competency that is achieved by cadets before they graduate from the institution (RQ3)			
Strongly Agree	93	63%	147
Agree	29	20%	147
Not Sure	9	6%	147
Disagree	7	5%	147
Strongly Disagree	9	6%	147
The Indonesian maritime education and training institutions must create policies that make it mandatory for all cadets and lecturers to use the English language routinely (RQ4)			
Strongly Agree	89	61%	147
Agree	32	22%	147
Not Sure	11	7%	147
Disagree	7	5%	147
Strongly Disagree	8	5%	147
Indonesian maritime education and training institutions have to determine the minimum specific requirements regarding a potential lecturer's seagoing experience during the lecturer's recruitment process (RQ 7)			
Strongly Agree	92	63%	147
Agree	33	22%	147
Not Sure	8	5%	147
Disagree	6	4%	147
Strongly Disagree	8	5%	147
Indonesian maritime education and training institutions have to support and encourage their lecturers to acquire postgraduate degrees (Master's degree and Doctor of Philosophy) (RQ8)			
Strongly Agree	90	61%	147
Agree	28	19%	147
Not Sure	10	7%	147
Disagree	10	7%	147
Strongly Disagree	9	6%	147
Indonesian maritime education and training institutions have to provide opportunities for lecturers to enhance their seagoing experience through going onboard (RQ9)			
Strongly Agree	94	64%	147
Agree	28	19%	147
Not Sure	13	9%	147
Disagree	4	3%	147
Strongly Disagree	8	5%	147

Strategies			
Question and Answer	Response	Percentage	N
The seafarer's union has to enhance and develop their services in terms of seafarer's protection and seafarer's welfare that are given to seafarer members (RQ 16)			
Strongly Agree	99	67%	147
Agree	22	15%	147
Not Sure	10	7%	147
Disagree	7	5%	147
Strongly Disagree	9	6%	147
The maritime administration has to continuously develop international cooperation with other states in terms of the recognition of Indonesian seafarers' certificates (RQ17)			
Strongly Agree	95	65%	147
Agree	28	19%	147
Not Sure	11	7%	147
Disagree	4	3%	147
Strongly Disagree	9	6%	147
International crew manning agencies and international shipping companies have to give opportunities to maritime degree graduates from Indonesia who do not have international seagoing experience but only have national seagoing experience to be employed as junior officers (RQ18)			
Strongly Agree	94	64%	147
Agree	27	18%	147
Not Sure	8	5%	147
Disagree	5	3%	147
Strongly Disagree	13	9%	147

4.2.4 Identify and account for the mean percentages of respondents who responded to the approaches and strategies questions

In this section, based on the percentage of responses to approaches and strategies questions, the researcher indicated the meaning of percentages for those results. The following data concerning the meaning of percentages for approach responses was described in Table 11.

Table 11. *The mean percentages of respondents who responded to the approach's questions*

Number	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree	Total
Total	64%	19%	7%	5%	6%	100%

The following data concerning the mean percentages of Strategies responses was described in Table 12.

Table 12. *The mean percentages of respondents who responded to the strategies questions*

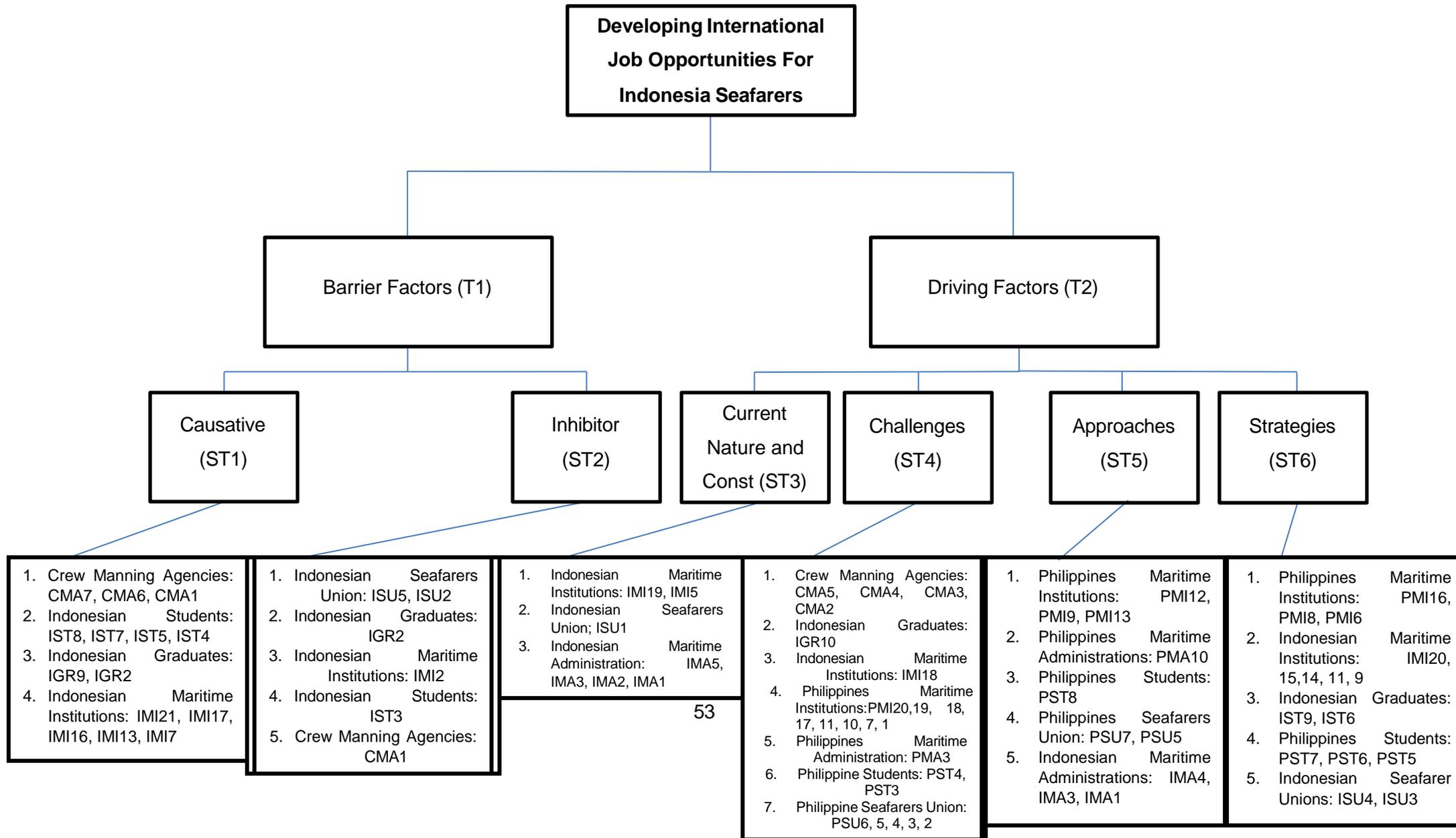
Number	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree	Total
Total	63%	20%	7%	4%	6%	100%

Chapter 5: Discussion

5.1 The Result of Qualitative Data

The extraction of the essential structure process was defined as the process in terms of how to integrate all concepts that were obtained from the result of thematic analysis or coding system into the conceptual framework or storyline that aims to cover all research questions. In addition, through this conceptual framework, the researcher tried to organize and elaborate on all existing concepts (De Casterlé et al., 2012b). In this case, the researcher elaborated all the results of the thematic analysis and coding system into a conceptual framework, which were described in Figure 14.

Figure 14. the Conceptual Framework



Based on all data obtained from the conceptual framework previously mentioned, the researcher has found two themes (Barrier factor and Driving factor) that can be guidance in analyzing all data research which in turn were used to address and cover the research question regarding the current nature and construction of the Maritime Education Training (MET) system in Indonesia (research question number 1) and the main factors that inhibit access of diploma-degree graduates of Indonesia's Maritime Education Training (MET) system to employment in the International Shipping Fleet (research question number 2). This process was supported by reviewing documents to find approaches and strategies that were used to address challenges in the international employment of graduates from Indonesian Maritime Education Training (MET) systems. This process will be described as follows:

1. The research question regarding the current nature and construction of the Maritime Education Training (MET) system in Indonesia.

Currently, the Ministry of Transportation has approved 110 maritime education training institutions (METI), consisting of thirteen (13) public maritime education training institutions and ninety-seven (97) private maritime education training institutions. Currently, Indonesia has 12 public Maritime Education Training Institutions (METI) under the Centre of Human Resources Development on Sea Transportation and 1 public METI under the Center of Human Resources Development on Land Transportation, which have been public service agencies. This means that based on Indonesian Law Number 1, 2024 Articles 68 and 69, these organizations have the main task and function of providing public services that can implement the flexible finance management pattern by prioritizing productivity, efficiency, and effectiveness services to the public. In addition, these organizations have the aim of enhancing government instantiation services for the public in order to develop and increase general well-being and intellectual well-being. They also have flexibility in controlling management finance based on economic principles and productivity by implementing healthy business practices in Indonesia. Therefore, based on the aforesaid statement, all maritime education training institutions in Indonesia have been given full trust by the government to manage their finances. In addition, based on data obtained from the Statistics Report of the Centre for Human Resources Development on Sea Transportation in Indonesia, Indonesian Maritime Education Training (METI) under the Centre

for Human Resources Development on Sea Transportation graduated 2,967 diploma degree students in 2022, acquired from twelve (12) Maritime Education Training Institutions (METI), so that each of the Maritime Education Training Institutions (METI) has graduated approximately 300 students per year. However, based on the data of graduates, only 70.01% have worked and 29,99% are unemployed. If taking into consideration how many graduates have worked in the international shipping fleets, based on the data obtained from the oldest and biggest three Maritime Education Training Institutions (METI) in Indonesia, namely the higher Maritime Education Training Jakarta, Semarang Maritime Polytechnics, and Makassar Maritime Polytechnics, the average number of graduates that have worked in the international shipping fleets does not exceed 11.5%. One of factors that inhibit access of Bachelor/Diploma Degree graduates to join in international shipping fleets is the lack of English competency. This is based on the literature review in Chapter II, in which Asia-Pacific International University, 2019 stated that, since the early years of independence, Indonesians were not willing to consider English as an additional language, so that this condition forced the English language as the third language in Indonesia. This means that the English language is in position after local Indonesian language. After over fifty years of independence, the English language teaching is difficult to implement in Indonesia because Indonesians consider the English language as a foreign language (third language). Therefore, the English language is one of the factors inhibiting access of Bachelor/Diploma Degree graduates in Indonesia to compete in international shipping fleets. This can be proved based on the opinions and arguments of representatives of Indonesian diploma degree students. They claim do not have confidence in their English competency because they are not used to using it. Although there are some English language programs that have been implemented, there are still some that must be developed more. In addition, there are no policies that obligate every cadet to use the English language in their daily activities in the Indonesian Maritime Education Training Institutions (METI). In addition, based on the argument and opinion stated by the representatives of Indonesian Maritime Education Training Institutions (METI) (IMI19), the Indonesian government through the Human Resources Development Agency on Transportation has contributed to Maritime

Education Training Institutions (METI) by providing six training vessels that established in 2008 by steadfast ship's building Indonesia. These are distributed into six Maritime Education Training Institutions namely: Higher education training Jakarta, Malahayati Maritime Polytechnic, Surabaya Maritime Polytechnic, Makassar Maritime Polytechnic, Sulawesi Utara Maritime Polytechnic, and Sorong Maritime Polytechnic, but recently these training vessels have been taken over by the Directorate General of Sea Transportation to be used as conventional vessels in supporting the government program "TOL LAUT".

Based on the argument and opinion stated by a representative of the Indonesian Maritime Education Training Institution (METI) (IMI5), currently, the role of the Indonesian maritime government through the Human Resources Development Agency on Transportation has contributed to giving financial support through the tuition fees for cadets, in addition to the maintenance and building costs for infrastructure and facilities, for instance, the cadet dormitory, classroom, simulator, laboratory, and other facilities. Based on the argument and opinion stated by the representative of the Indonesian Maritime Administration (IMA5), the Indonesian government, through the role of the Indonesian Maritime Administration, has supported in developing and enhancing international relations and cooperation with other countries, which currently already have 69 countries that have recognized Indonesian seafarers' certificates as the requirement of the International Regulation of Standard Training Certification and Watchkeeping (STCW) 1978 as amended particularly Regulation 1/10 recognition certificates. Based on the argument and opinion stated by the representative of the Indonesian Maritime Administration (IMA1), currently, Indonesia is still a party to the parties stated in the IMO document MSC.1/Circ.1163/Rev.13, published on October 18, 2021, regarding parties to the international convention on the Standard Training Certification and Watchkeeping (STCW) 1978 as amended. In addition, Indonesia still belongs to the Tokyo MOU regarding the flag performance whitelist that is recognized by all Asia-Pacific countries and signed and applies from July 1, 2024, up to June 30, 2025. Based on the argument and opinion stated by the representative of the Indonesian Seafarers Union (ISU 1 and ISU 2), Currently, Indonesia has five

seafarers unions that comprise 1 seafarers union that has been affiliated with the International Transport Federation (ITF), and 4 seafarer unions left that have not been affiliated with the International Transport Federation (ITF). Recently, the Indonesian Seafarers Union already has 150 collective bargaining agreements (CBA) with international shipping companies and shipowners that provide guidance and implementation mechanisms based on the requirements of the Maritime Labour Convention (MLC) 2006.

2. The research question regarding the main factors that inhibit access of diploma-degree graduates of Indonesia's Maritime Education Training (MET) system to employment in the International Shipping Fleet.

Based on the data obtained from the conceptual framework previously mentioned in Figure 15, some factors have been identified that inhibit access to international employment for Bachelor/Diploma Degree Graduates from Indonesian maritime education training (MET) systems, which are obtained from the Barrier factor theme (the causative and inhibitor codes), namely:

- A. Based on arguments and opinions stated by the representative of the International Crew Manning Agency (CMA7), Indonesian diploma degree students (IST7, IST5, IST3), Indonesian Maritime Education Training Institutions (IMI16, IMI13). Based on those arguments and opinions, the first factor that inhibits access to international employment for Bachelor/Diploma Degree Graduates from Indonesian maritime education training (MET) systems is **the lack of English competency and skill possessed by Indonesian seafarers, which is caused by the non-existent standard English competency of applicants when determining whether or not to enrol new cadets, before they embark on seagoing training, and before they graduate from the institution. In addition, the implementation of the TOEFL test has not been carried out regularly, moreover, there are no strict policies that must be implemented regarding the implementation of English competency in the Maritime Education Training Institutions (METI), which later enhanced and developed their confidence, competency, and skill to join and compete in the international shipping fleets.**

- B. Based on arguments and opinions stated by the representative of the Indonesian Bachelor/Diploma Degree Graduates (IGR9, IGR2), Indonesian Maritime Education Training Institutions (METI) (IMI2, IMI21, IMI17), and Indonesian Seafarers Unions (ISU5, ISU2), the second factor that inhibits access to international employment for Bachelor/Diploma Degree Graduates from Indonesian maritime education training (MET) systems is **the lack of relationships and cooperation between Indonesian Maritime Education Training Institutions METI) with national and International stakeholders in terms of promoting their cadets at the international level through creating and enhancing cooperation with international shipping companies/shipowners associations and participating to be a member of the International Association Maritime University (IAMU). These conditions caused Indonesian diploma degree students to not have opportunities to get a cadet service bond with international shipping companies/shipowners. Indonesian Bachelor/Diploma Degree graduates did not have opportunities to get international seagoing experiences. Moreover, the maritime education training institutions have not given a chance for every graduate to enhance their seagoing experience through utilizing their training vessel that was taken over by the Directorate General Sea Transportation currently supporting the Government program "TOL LAUT". Additionally, there has been no cooperation among Maritime Education Training Institutions (METI), the Indonesian Seafarers Union, and the Maritime Administration in developing international job opportunities for Indonesian seafarers.**
- C. Based on arguments and opinions stated by the representatives of the International Crew Manning Agency (CMA6, CMA1), Indonesian Diploma Degree Students (IST8), Indonesian Maritime Education Training Institutions (METI) (IMI7), the third factor that inhibits access to international employment for Bachelor/Diploma Degree Graduates from Indonesian maritime education training (MET) systems is **the lack of international cooperation between Indonesian Maritime Education Training Institutions with International shipping companies/shipowners in terms of participation during curriculum development and evaluation.**

Indonesian and international stakeholders should be involved in participating during the preparation of recruitment of new cadets regarding determination of minimum standard competency and skill of new cadets. They should also be involved in participating in workshops and seminars regarding requirements and procedures that must be prepared by cadets to join tests in international shipping companies and the minimum standard competency that must be had by Bachelor/Diploma Degree Graduates to join international shipping fleets.

3. The research question regarding what approaches, and strategies can help address the challenges to international employment of graduates from the Indonesian Maritime Education Training (MET) system.

Approaches and strategies that were obtained from the driving factors, which were described in the conceptual framework were found. Some intended approaches and strategies encompass:

- A. Based on the first factor regarding the lack of English competency and skill possessed by Indonesian seafarers, which is caused by the inexistence of standard English competency of applicants when determining whether or not to enroll new cadets, before they embark on seagoing training, and before they graduate from the institution. In addition, the implementation of the TOEFL test has not been carried out regularly, and there are no strict policies that must be implemented regarding the implementation of English competency in the Maritime Education Training Institutions (METI). Therefore, approaches and strategies, conducted by Indonesian Maritime Education Training Institutions, were obtained from arguments and opinions of respondents from Philippine maritime administrations and students (PMI16, PMI17, PST7) that can help address the challenges to international employment of graduates from Indonesian Maritime Education Training (MET) system, and review documents concerning the minimum English proficiency for international students based on the requirement for IELTS, Cambridge English, Person Test English (PTE), TOEFL requirement for paper-based and TOEFL requirement for internet based score, and the review document of universal conversion table for the TOEFL-IBT, TOEFL-

PBT, TOEFL-CBT, IELTS, and TOEIC scores. In this case approaches and strategies in questions are as follows:

- 1) Indonesian maritime education and training institutions must determine the English language competency of applicants when determining whether or not to enroll new cadets in MET institutions;
 - 2) Indonesian maritime education and training institutions must determine the English standard competency that is achieved by cadets before they embark on seagoing training;
 - 3) Indonesian maritime education and training institutions must determine the English standard competency that is achieved by cadets before they graduate from the institution;
 - 4) The Indonesian maritime education and training system must create policies that make it mandatory for all cadets and lecturers to use the English language routinely;
 - 5) Indonesian maritime education and training institutions must establish cooperation agreements with official English training providers and institutions to enhance their cadets' English competency.
- B. Based on the second factor regarding the lack of relationships and cooperation between Indonesian Maritime Education Training Institutions with national and international stakeholders, this condition has resulted in Indonesian diploma degree students lacking opportunities to secure a cadet service bond with international shipping companies/shipowners and Indonesia Bachelor/Diploma degree graduates did not have opportunities to get international seagoing experiences. Therefore, approaches and strategies that were used by Indonesian Maritime Education Training Institutions which were obtained from arguments and opinions in the conceptual framework that can help address the challenges to international employment of graduates from Indonesian Maritime Education Training (MET) system, namely: PMI19, PMI10, PMI12, PMI6, PMI8, PMI11, PMI12, PMI20, PMI17, IMI9, IMI20, PST4, PST3, PSU5, IST9, IGR10, CMA5, CMA3, PMA10, IMA1, PSU1, PSU4, PSU6, ISU4, ISU3 and review documents concerning some shipowner associations that can be cooperated by Indonesian Maritime Education Training Institutions (METI), for instance: International Maritime

Employers Council (IMEC), Korean Shipowners Associations (KSA), International Association Mariners Management Association Japan (IMMAJ), and Royal Association Netherlands Shipowners (KVNR). In addition, the review document of the Memorandum of Agreement between Surabaya Polytechnic Maritime Education Training Institution and Directorate General of Sea Transportation Indonesian Number: HK.201/1/16/Poltekpel.SBY-2024 concerning the training vessel for the organization of pioneer ship public service activities, according to article 4 point 1.a, it was stated that Maritime education training institutions can propose their graduates and lecturers to be a crew of vessel. This condition can be utilized by Bachelor/Diploma Degree Graduates to have seagoing experiences and lecturers in enhancing and developing their seagoing experiences as well. In addition, from the Indonesian Ministry Transportation Regulation Number 84, 2013 concerning placement and recruitment crews of a vessel, particularly article 2 point G.2 concerning placement and recruitment crews of vessel. Therefore, approaches and strategies questions are as follows:

- 1) Indonesian maritime education and training institutions have to develop cooperation with International Ship Owners Associations in terms of developing international job opportunities for seafarers;
- 2) Indonesian maritime education and training institutions have to determine the minimum specific requirements regarding a potential lecturer's seagoing experience during the lecturer's recruitment process;
- 3) Indonesian maritime education and training institutions have to support and encourage their lecturers to acquire postgraduate degrees (a master's degree and a Doctor of Philosophy);
- 4) Indonesian maritime education and training institutions have to provide opportunities for lecturers to enhance their seagoing experience by going on board;
- 5) Indonesian maritime education and training institutions have to provide the seagoing experience for a diploma degree graduate through utilizing existing training vessels;

- 6) International crew manning agencies/international shipping companies have to give opportunities to maritime degree graduates from Indonesia who do not have international seagoing experience but only have national seagoing experience to be employed as junior officers;
 - 7) The maritime administration, maritime education training, seafarers union, and other stakeholders in the shipping industry have to collaborate in terms of developing international job opportunities for Indonesian seafarers;
 - 8) The maritime administration has to continuously develop international cooperation with other states in terms of recognition of Indonesian seafarers' certificates;
 - 9) The Indonesian maritime education and training system requires every international crew manning agency or international shipping company to have a collective bargaining agreement (CBA) with established seafarers unions, particularly that affiliated with the International Transport Federation (ITF);
 - 10) The seafarer's union has to enhance and develop its services in terms of the seafarer's protection and the seafarer's welfare that are given to its members.
- C. Based on the third factor regarding the lack of international cooperation between Indonesian Maritime Education Training Institutions with International shipping companies/shipowners, approaches and strategies that were conducted by Indonesian Maritime Education Training Institutions obtained from arguments and opinions in the conceptual framework, namely: CMA2, PMI13, PST8, and IMI11 that can help address the challenges to international employment of graduates from Indonesian Maritime Education Training (MET) system, and review documents regarding general instructions and guidelines for crew manning agents and standard for the selection of new personnel obtained from one of the international crew manning agencies/international shipping companies, it supposed to be informed and socialized by international crew manning agencies/international shipping companies to Maritime Education Training

Institutions. Therefore, the approaches and strategies in question are as follows:

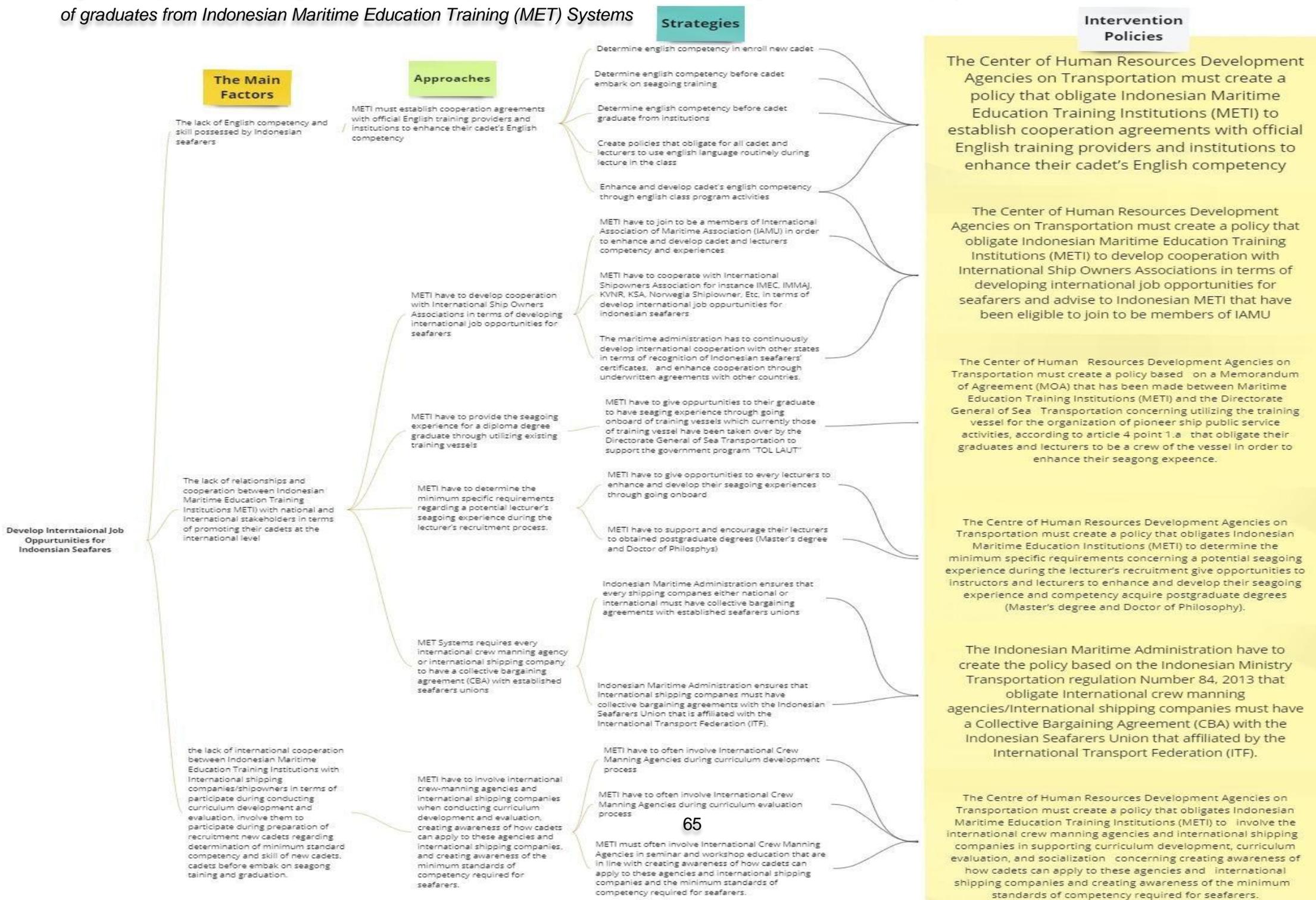
- 1) Indonesian maritime education and training institutions have to involve international crew manning agencies and international shipping companies when developing curriculum;
- 2) Indonesian maritime education and training institutions have to involve international crew manning agencies and international shipping companies in conducting curriculum evaluation processes;
- 3) Indonesian maritime education and training institutions have to cooperate with international crew manning agencies and international shipping companies, creating awareness of how cadets can apply to these agencies and international shipping companies;
- 4) Indonesian maritime education and training institutions have to cooperate with international crew manning agencies and international shipping companies to create awareness of the minimum standards of competency required for seafarers.

5.2 The Result of Quantitative Data

In this section, the researcher indicated the results of quantitative data analyses based on the mean of percentages for approach and strategy responses. According to the aforementioned Tables 13 and 14, most of the respondents have agreed towards approaches and strategies that strengthened the questionnaire questions. This can be proved by acquisition answers as 64% strongly agree and 19% agree against all approaches. In addition, 63% strongly agree and 20% agree against all strategies, but only a few that stated not sure and not agreed that proved by acquisition as 7% not sure, 5% disagree, 6% Strongly disagree towards all approaches. In addition, 7% not sure, 4% disagree, 6% strongly disagree against all strategies, so based on these statements, it can be concluded that all approaches and strategies that strengthened the questionnaire questions can help address challenges to international employment of graduates in the Indonesian Maritime Education Training System. Based on the defined approach and strategies, the researcher was supported by some review documents to find some intervention

policies that are in line with the defined approach and strategies, which were described in Figure 15.

Figure 15. Approaches, Strategies, and Intervention policies that can help address challenges to International employment of graduates from Indonesian Maritime Education Training (MET) Systems



Chapter 6: Summary and Conclusions

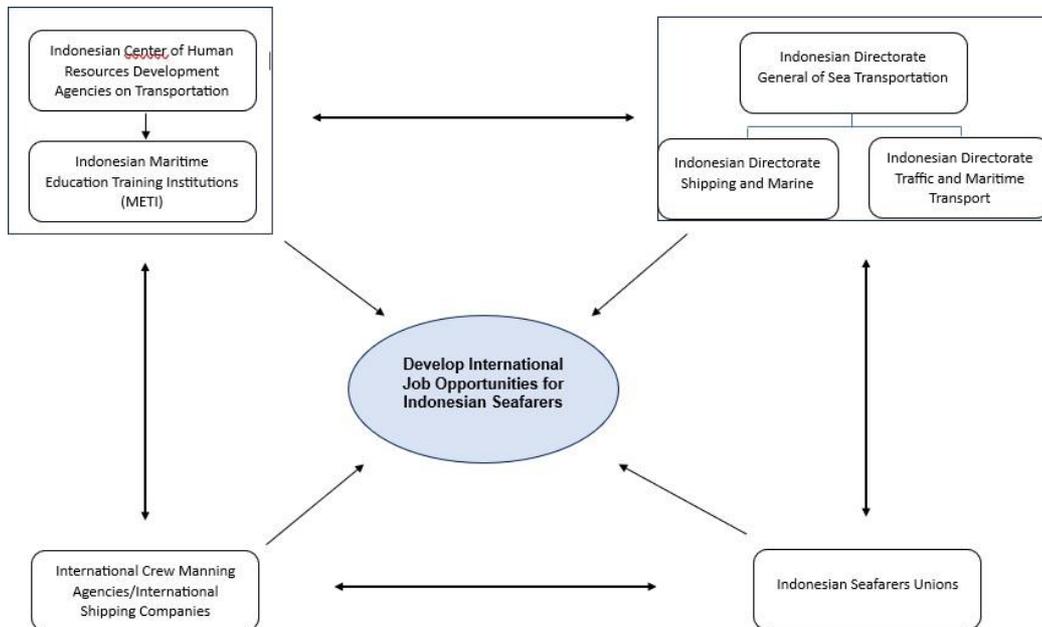
In this chapter, the researcher described the summary and conclusion of the research, as well as the limitations and recommendations for future research.

6.1 Conclusions

This research has investigated possibilities in terms of how to develop international job opportunities for Indonesian seafarers, which is currently one of the essential issues in the Indonesian Maritime Education Training System. This research has used a mixed-method approach, particularly exploratory data research design through conducting interviews with some respondents from different maritime organizations and countries, continuing to conduct survey questionnaires. All processes were supported by secondary data, namely literature reviews and review documents, and exploratory methodology through employing thematic analysis data and descriptive statistical analysis data.

As a result of this research, it can be concluded that developing international job opportunities for Indonesian seafarers can be achieved if the Indonesian maritime government (Indonesian Maritime Administration, Indonesian Maritime Education Training Institutions, and Diploma degree students) and Indonesian maritime stakeholders (International crew manning agencies and Indonesian Seafarers Unions) join hands together to overcome this issue through the implementation of policies that align with and support each other in developing international job opportunities for Indonesian seafarers. This process is outlined in Figure 16.

Figure 16. *The cooperation scheme among Indonesian Maritime Governments and Indonesian Maritime Stakeholders*



Based on Figure 16, all Indonesian Maritime Government and Maritime Stakeholders have their own important roles and interrelated roles that encompass the following:

1. The Maritime Education Training Institutions through the policy established by the Centre of Human Resources Development Agencies on Transportation should determine the English standard competency during new cadet acceptance, before cadets embark on seagoing training, and before they graduate. In addition, they created policies that obligate cadets and lecturers to use the English language routinely during lectures;
2. The Indonesian Maritime Education Training Institutions (METI) through the Centre of Human Resources Development Agencies on Transportation should create a policy that obligates every maritime education training institution to cooperate with international shipowner associations, collaborate with Indonesian maritime administrations and Indonesian seafarers unions in promoting Indonesian seafarers to international shipowners associations so that they are interested in employing Indonesian seafarers;
3. The Indonesian Maritime Education Training Institutions (METI) through the policy established by the Centre of Human Resources Development Agencies on

Transportation, should determine the minimum specific requirements regarding a potential lecturer's seagoing experience during the lecturer's recruitment process and give opportunities for instructors to enhance their seagoing experience through going onboard. In addition, they must support and encourage their instructors and lecturers to obtain postgraduate degrees (a master's degree and a Doctor of Philosophy). Therefore, the Maritime Education Training Institution (METI) through the Centre of Human Resources Development Agencies on Transportations must cooperate with the Directorate of Maritime Traffic and Transport under the Directorate General of Sea Transportation to provide opportunities for instructors and lecturers to join the government program "TOLL LAUT" to enhance and develop their seagoing experiences;

4. Indonesian Maritime Education Training Institutions (METI) through the Center of Human Resources Development Agencies on Transportation should cooperate with the Directorate of Maritime Traffic and Transport under the Directorate General of Sea Transportation to provide opportunities for first graduates to join and support the government program "TOLL LAUT" in order they can enhance and develop their seagoing experiences;
5. Indonesia Maritime Education Training Institutions (METI) through the Center of Human Resources Development Agencies on Transportation should create a policy that obligates every Maritime Education Training Institution (METI) to involve International Crew Manning Agencies/International Shipping Companies during the curriculum development process, curriculum evaluation process, creating awareness of how cadets can apply to these international crew manning agencies/international shipping companies and creating awareness of the minimum standards of competency required for seafarers. through workshops and seminars;
6. Indonesia Maritime Education Training Institutions (METI) should work hand in hand with the Indonesian Maritime Administration and the Indonesian Seafarers Union to ensure that every national and international shipping company has a collective bargaining agreement with the Indonesian Seafarers Union, particularly for international crew-manning agencies and international shipping companies, must have a collective bargaining agreement (CBA) with Indonesian seafarers unions that are affiliated with the International Transport Federation (ITF), so that

Indonesian Seafarers Union would be able to enhance and develop their services that automatically affected seafarers' welfare.

6.2 Limitation and Future Research

- This research study focusses on developing international job opportunities for Indonesian bachelors and Bachelor/Diploma Degree Graduates under the Ministry of Transportation;
- This research study has resulted in intervention policies that should be followed up by the Indonesian Maritime Government in supporting the development of international job opportunities for Indonesian seafarers;
- This research has used convenience sampling to collect data through interviews and online questionnaires; therefore, this research study does not guarantee that the population being studied (Maritime Education Training Institutions, Bachelor/Diploma Degree Students, Bachelor/Diploma Degree Graduates, Maritime Administrations, International Crew Manning Agencies, and Indonesian Seafarers Unions) is fully represented.

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Appendices

Appendix A	Semi-structured Interviews for Maritime Administrations, Maritime Education Training Institutions, Bachelor/Diploma Degree Students, Bachelor/Diploma Degree Graduates, Seafarers Union, and International Crew Manning Agencies.
Appendix B	Survey Questionnaire questions for Maritime Administrations, Maritime Education Training Institutions, Bachelor/Diploma Degree Students, Bachelor/Diploma Degree Graduates, Seafarers Union, and International Crew Manning Agencies.
Appendix C	General Instruction and Guideline For Crew Manning Agent
Appendix D	Standard For Selection of New Personnel
Appendix E	Collective Bargaining Agreement (CBA) between Netherland Maritime Employers Association (NEMEA) and the Indonesian Seafarers Union
Appendix F	Standard English Competency TOEFL, IELTS, and other requirements
Appendix G	Conversion Table TOEFL IBT, PBT, CBT, and IELTS test
Appendix H	Government Agency Performance Report of The Human Resources Development Agencies on Transportation Indonesia 2022
Appendix I	Annual Report of The Human Resources Development Agencies on Transportation Indonesia 2022
Appendix J	Annual Statistical Report of The Center of Human Resources Development on Sea Transportation 2022
Appendix K	The list of the number of national flagged vessels in Indonesia
Appendix L	The Memorandum of Agreement Between Surabaya Maritime Polytechnic and Indonesian Directorate General of Sea Transportation

Appendix A: Semi-structured Interviews for Maritime Administrations, Maritime Education Training Institutions, Bachelor/Diploma Degree Students, Bachelor/Diploma Degree Graduates, Seafarers Union, and International Crew Manning Agencies

SEMI-STRUCTURED INTERVIEW QUESTIONS

Guidance Questions

The interview process will involve several stakeholders, including:

a. Maritime Education Training

- 1) What is the total number of diploma-degree graduates in 2023 in a year?
- 2) What is the total number of graduates who have joined the international shipping fleets in a year?
- 3) What Extent does the government contribute to the tuition fees for diploma-degree cadets?
- 4) Where is the tuition fee resource for Bachelor/Diploma Degree Graduates from?
- 5) How many cadets have possessed a cadet service bond with an international shipping company?
- 6) How long does it normally take to conduct a cadet service bond with the international shipping company?
- 7) What kind of guarantees are offered by shipping companies to cadets during a cadet service bond?
- 8) Since when do the cadet service bond between international shipping company and cadets are performed?
- 9) In terms of the recruitment of a lecturer, did your institutions determined the specific requirement regarding the lecturer's seagoing experiences?
- 10) Did your maritime institutions give the opportunities for lecturer to upgrade their competence and skill? For instance, let them to upgrade or update the seagoing experience.
- 11) In terms of the initial recruitment process for cadet candidates, were shipping companies involved in this selection process?
- 12) How many International Shipping companies have cooperated with your institutions?

- 13) What kind of contribution that you have given to cadets in looking for job opportunities in the international shipping fleets?
- 14) What kind of feedback that given by your maritime institution to international shipping fleets to attract them in order they willing recruit your cadets?
- 15) Did you involve some shipping companies in the curriculum development and evaluation process?
- 16) How often have your institutions conducted the curriculum development and evaluation process?
- 17) In terms of the simulator and laboratory functions, did you involve some international shipping companies to contribute in providing the simulator and laboratory?
- 18) Have you established standard English proficiency as an initial requirement for cadet candidates?
- 19) Is there a final English passing grade that is defined for Bachelor/Diploma Degree Graduates?
- 20) What kind of strategies were used to enhance the cadet's English competence in order to achieve the defined English target?
- 21) To what extent are you familiar with the International Association Maritime University (IAMU)?
- 22) Since when did your institution join the International Association Maritime University (IAMU)?
- 23) Is there anything else that you haven't done in term of how to develop international job opportunities to seafarers?
- 24) Does your maritime institution have a training vessel?
- 25) What is the role and function of the training vessel that you have currently?
- 26) What is your existing training vessel capable of being utilized for conventional purposes?
- 27) Have you ever involved Bachelor/Diploma Degree Graduates to enhance and develop their seagoing experience before they will join in the international shipping fleets?

b. Diploma-degree graduates

- 1) Do you have a cadet service bond with the international shipping company?

- 2) Since when did you obtain a cadet service bond with a shipping company?
- 3) How long does a process normally conduct a cadet service bond with a shipping company?
- 4) Do you have a job guarantee with Shipping International Fleets after graduation?
- 5) Is there a guarantee to enhance your competence and skills while you get a cadet service bond?
- 6) Are you confident with the skills and knowledge that you have currently, to apply for a job in the international shipping fleets?
- 7) Is there a specific target regarding English competency skills that you have to achieve before graduation?
- 8) What kind of support system that given by your maritime institution in term of enhance your english competence skill?
- 9) Have you ever looked up an international job vacancy through the crew manning agency?
- 10) Regarding some issues recently regarding the extra payment that have been paid by seafarers, have you ever had that experience before?
- 11) Have you ever applied for your application through the website of international crew manning agency?
- 12) Have you ever gotten training and workshops from your maritime education training (MET) in terms of how to apply for job vacancies in the international shipping fleets?
- 13) What's your expectations in the future for maritime institutions in term of how to develop international job opportunities for diploma degree students?

c. Seafarer Community

1. Could you explain regarding the role and function from your organization as a seafarers community in your country?
2. How many seafarer communities actually that are registered in your country currently?
3. How many seafarers community actually that have been recognised and affiliated by national (government) and international organizations (International Transport Workers Federation)?

4. Is there evidence that you can give me to prove that you have been recognized by the International Transport Federation Workers (ITF)?
5. How many international shipping company that have cooperated to have Collective Bargaining Agreement (CBA) with your organizations?
6. How many seafarers that have joined in your community seafarers currently?
7. Is there a specific requirement that must be possessed by seafarers to be the member in your organizations?
8. What kind of services that are given and accepted by seafarers after they have been members in your community?
9. What kind of rights and obligations must be possessed and conducted by seafarers members in your community?
10. What contribution that have been performed by your institutions to develop the international job opportunities to seafarers?
11. If there is a dispute between the seafarer members and international shipping companies/shipowners, what extent of your community in addressing this issue?
12. Is there a contribution that given by the government in developing and supporting your community currently?
13. What kind of Government contribution that you need as the representative from seafarer's community in supporting and developing the seafarers community performance?

d. **Maritime Administration**

- 1) Is your country still included on the white list of International Maritime Organizations (IMO) currently?
- 2) According to Independent evaluation as requirement regulation I/8 standard quality and I/7 communication information STCW 1978 as amended, the question is who is designated to conduct this independent evaluation? how about the appointed mechanism? when was this evaluation conducted last time?
- 3) According to the regulation I/10 recognition certificate STCW 1978 as amended, the written undertaking shall be conducted between the party who recognized certificates and the party who issued the certificate to be recognized, based on that statement how many countries that has

recognized the certificate of competence (COC) of Philippine seafarers?
(Based on a regulation I/10 recognition certificate)

- 4) Regarding which countries have recognized Seafarers certificates, how to make this information known by all member state of IMO?
- 5) Should this information published to public social and reported to the secretary general of IMO as well?
- 6) what efforts so far that have been made by your Maritime Administration to expand the recognition of Filipino seafarer's certificates?
- 7) How often did you monitoring and conduct internal audit surveillance to your maritime institution?
- 8) If you find that one of the maritime institutions doesn't meet the minimum standard requirement about quality standard system STCW 1978, what action that you give to them?
- 9) Has the Philippine country ever been on the International Maritime Organization's (IMO) blacklist?
- 10) What extent of the role of the Philippine maritime administration related seafarer's certificate?
- 11) How can the International shipping company make sure that the Phillipine sefarer's certificate officially issued by maritime administration?
- 12) What extent of the role of maritime administration in term of how to develop international job opportunities for Phillipine seafarers?

e. Crewing Manning Agency

One of the staff members will conduct the interview process, asking the following questions:

- 1) Could you briefly described the role and function from your Seafarers Community in maritime affairs?
- 2) How many international shipping companies have incorporated with your company?
- 3) After the seafarers are accepted to be a part of crewing in the international shipping companies, is there any cost that must be paid by those to your crewing manning agency?
- 4) How many of Indonesia's seafarers that employed in the international shipping fleet through your agency in a year?

- 5) What kind of significant issues that you have during hire Indonesia's seafarers?
- 6) Have you provided an application platform that makes it easier for Indonesia's seafarers to apply for their job application?
- 7) What selection that you provide in hiring Indonesia's seafarers?
- 8) Do you determine the specific standard competency in hiring seafarers in Indonesia?
- 9) Is it align with standard competency that are defined by STCW 1978 as amended?
- 10) Is this specific standard competence determined by shipowner or by your own company?
- 11) Is this specific standard competency have been known by all Indonesian maritime institutions/training centers as well?
- 12) What corporation that have been established between your crewing manning agency with Indonesia's maritime institutions/training center, particularly in term of how to develop international job opportunities for Indonesia's seafarers?
- 13) Is there a contribution given by the Indonesian government in supporting your crewing manning agency performance?
- 14) Did you conduct a monitoring and evaluation process toward the seafarer's performance that was hired through your agency?
- 15) What complaints are often submitted by international shipping companies towards Indonesia's seafarers performance?
- 16) Did you ever to be involved within curriculum development and curriculum evaluation with the Indonesia maritime institutions?
- 17) What Your perspective as an international crewing manning agency, what kind of causative factor that all seafarers Indonesia is difficult to compete in the international level?

QUESTIONNAIRE

The structure of the questionnaire will be determined based on the findings from the interview process, as indicated in the research methodology section. This is because the interview process will provide valuable insights that will inform the selection of multiple-choice responses.

Appendix B: Survey Questionnaire questions for Maritime Administrations, Maritime Education Training Institutions, Bachelor/Diploma Degree Students, Bachelor/Diploma Degree Graduates, Seafarers Union, and International Crew Manning Agencies

QUESTIONNAIRE QUESTIONS

Survey on Perceptions in Terms of How to Develop International Job Opportunities for Seafarers

Dear Participants,

The International Shipping Industry has an essential role in supporting and providing international job opportunities for seafarers, however recently Indonesian seafarers have inhibited access to international shipping fleets, This research entitled “Investigation Possibilities: Developing International Job Opportunities for Indonesian Seafarers” is therefore aimed at investigating the attractiveness of Indonesian seafarers to the international maritime industry. This questionnaire will focus on your perspectives as an academic and related stakeholder in the shipping industry concerning how to develop international job opportunities for Indonesian seafarers, particularly regarding strategies that can help address the challenges to international employment of graduates from Indonesian Maritime Education Training (MET) system.

We invite you to participate in this research by completing a short survey. Your participation is completely voluntary and anonymous. All data collected will be used for dissertation research purposes only. Your participation in this survey is highly appreciated.

Your personal information will not be published and, you may withdraw from the research at any time. A personal data relating to participants is held and processed in the strictest confidence and will be deleted the ethics standards of the World Maritime University.

The Survey will ask you about :

1. Your role and experience within the maritime industry;
2. Your views on how to develop international job opportunities for seafarers;

3. Your perceptions in relating strategies that can help address the challenges to international employment of graduates from the Indonesian Maritime Education Training (MET) system;

The Survey will take 15-20 minutes approximately. Thank you again for your participation.

Section 1: Background Information

1. Stakeholder Group: Please select the group stakeholders belong to:
 - a. Maritime Administration
 - b. Diploma Degree Students
 - c. Bachelor/Diploma Degree Graduates
 - d. Maritime Education Training Institution (lecturers, researchers, employees, etc)
 - e. International crew manning agency/International shipping company
 - f. Seafarers Unions
2. Role/Position: Briefly describe your role/position within the chosen stakeholder group.
3. Your Experience: How many years of experience have you had in this role/position
4. Age: Please enter your age
5. Gender: Please select your gender:
 - a. Male
 - b. Female
 - c. Prefer not to say
6. Country: Which Country are you from?

Section 2: Please indicate your agreement with the following statements relating to the international employment of graduates from Indonesian Maritime Education Training (MET) Institutions.

1. Indonesian maritime education and training institutions must determine the English language competency of applicants when determining whether or not to enroll new cadets in MET institutions.
 - Strongly Agree
 - Agree
 - Disagree

- Strongly Disagree
 - Not sure
2. Indonesian maritime education and training institutions must determine the English standard competency that is achieved by cadets before they embark on seagoing training.
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
 - Not sure
3. Indonesian maritime education and training institutions must determine the English standard competency that is achieved by cadets before they graduate from the institution.
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
 - Not sure
4. Indonesian maritime education and training system must create policies that make it mandatory for all cadets and lecturers to use the English language routinely.
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
 - Not sure
5. Indonesian maritime education and training institutions must establish cooperation agreements with official English training providers and institutions to enhance their cadet's English competency.
- Strongly Agree
 - Agree
 - Disagree

- Strongly Disagree
 - Not sure
6. Indonesian maritime education and training institutions have to develop cooperation with International Ship Owners Associations in terms of developing international job opportunities for seafarers.
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
 - Not sure
7. Indonesian maritime education and training institutions have to determine the minimum specific requirements regarding a potential lecturer's seagoing experience during the lecturer's recruitment process.
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
 - Not sure
8. Indonesian maritime education and training institutions have to support and encourage their lecturers acquire postgraduate degrees (Master's degree and Doctor of Philosophy).
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
 - Not sure
9. Indonesian maritime education and training institutions have to give opportunities for lecturers to enhance their seagoing experience through going onboard.
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree

- Not sure
10. Indonesian maritime education and training institutions have to provide the seagoing experience for a diploma degree graduate through utilizing existing training vessels.
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
 - Not sure
11. Indonesian maritime education and training have to involve the international crew manning agencies/international shipping companies when developing curriculum.
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
 - Not sure
12. Indonesian maritime education and training institutions have to involve international crew manning agencies/international shipping companies conducting curriculum evaluation processes.
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
 - Not sure
13. Indonesian maritime education and training institutions have to cooperate with international crew manning agencies/international shipping companies creating awareness of how cadets can apply to these international crew manning agencies/international shipping companies.
- Strongly Agree
 - Agree
 - Disagree

- Strongly Disagree
 - Not sure
14. Indonesian maritime education and training institutions have to cooperate with international crew manning agencies/international shipping companies in creating awareness of the minimum standards of competency required for seafarers.
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
 - Not sure
15. The Indonesian maritime education and training system has to every international crew manning agency/international shipping company have a collective bargaining Agreement (CBA) with established seafarers' unions.
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
 - Not sure
16. The seafarer's union has to enhance and develop their services in terms of seafarer's protection and seafarer's welfare that is given to seafarer's members.
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
 - Not sure
17. The maritime administration has to continuously develop international cooperation with other states in terms of recognition of Indonesian seafarers' certificates.
- Strongly Agree
 - Agree
 - Disagree

- Strongly Disagree
- Not sure

18. International crew manning agencies/international shipping companies have to give opportunities to maritime degree graduates from Indonesia who do not have international seagoing experience but only have national seagoing experience to be employed as junior officers.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- Not sure

19. The maritime administration, maritime education training, seafarers union, and other stakeholders in the shipping industry have to collaborate in terms of developing international job opportunities for seafarers.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- Not sure

Section 3 : Other Comments

1. Please provide any additional comments regarding strategies that can help address the challenges to international employment of graduates from the Indonesian Maritime Education and Training (MET system).

Thank you very much for your cooperation and participation.

Appendix C: General Instruction and Guideline For Crew Manning Agent

	<h1>CIDO CREWTEAM INSTRUCTION</h1>	DOC NO.: IDT-CMMD – 06 REVISION NO: 2017-11
	F-8 INSTRUCTION FOR MANNING AGENT	

**GENERAL INSTRUCTION AND GUIDELINE FOR CREW MANNING
AGENT**

1. CREW EMPLOYMENT STANDARD FOR OFFICERS

Criteria	Master/CE	CO/1E	2O/2E	3O/3E	E/E
Cert. Of Competency	MM/CME	CM/2ME	2M/3ME	3M/4ME	ME
Service Experience(NEW CREW) 1.Deck: Only PCC career 2.Engine: All ships career	One(1) Year	One(1) Year	One(1) Year	Eight(8) months	
Size of Vessel (GRT)	Over 6,000				
Max. Age	60(65K)	55	50	45	55
English Language	High	High	Good	Good	Good
BRTM/ECDIS GENERIC/TYPE SPECIFIC(DECK)	O	O	O	O	
ERM(ENGINE)	O	O	O	O	
GMDSS Cert. (DECK)	O	O	O	O	O
Radar Simulation & ARPA Course (DECK)	O	O	O	O	
Oil Pollution Prevention Course (ENGINE)	O	O			
Medical Care Course (DECK)	O	O	O	O	
SOLAS Cert.	O	O	O	O	O

Ⓓ Despite of the above, the age limit might be extended to some degree considering given conditions

(i.e. good evaluation, crew shortage, having higher licenses, welding experts, etc)

Ⓑ For-rehire: If not recommend or scored under 60 by ship evaluation, crew should present their guarantee letter for re-hire. Nevertheless, if get the same score(under 60 or not recommend), crew can not be re-employed.

2. FOR RATINGS AND CADET

Criteria	BSN	AB/OLR	OS/WPR	C/CK	M/M	CDT
Size of Vessel (GRT)	Over 6,000					
Max. Age	60	50	35	60	40	25
English Language	High	Good	Good	Good	Good	Good
SOLAS Cert.	O	O	O	O	O	O
Ratings Watch keeping Course	O (II/5, III/5)	O (II/5, III/5)	O(II/4, III/4)			
Drive License	O	O/-	O/-			

Ⓓ Despite of the above, the age limit might be extended to some degree considering given conditions

(i.e. good evaluation, crew shortage, having higher licenses, welding experts, etc .

For OLR who has good welding skill, age limit is 60 years old.)

Ⓑ At least one welding expert and one good driver should be arranged for each vessel.

Ⓒ For-rehie: If not recommend or scored under 70 by ship evaluation, crew should present their guarantee letter for re-hire. Nevertheless, if get the same score(under 70 or not recommend), crew cannot be re-employed.

Ⓓ Cadet must be verified by agent with impartial examination, which is to be confirmed by Cido

3. CREW EVALUATION & TRAINING

- A) **86-100**: EXCELLENT AND CONSIDER PROMOTION
- B) **71-85**: GOOD AND RECOMMEND FOR RE-HIRE
- C) **60-70**: CAN BE FOR REHIRE IN CASE OF CREW SHORTAGE--->NEED GURANTEE LETTER AND REQUIRED EDUCATION AND TRAINING BY MANNING AGENT FOR RE-HIRE
- D) **UNDER 60**: NOT FOR RE-HIRE---> CAN SPEAK FOR HIMSELF AND NEED CIDO'S APOVAL FOR RE-EMPLOYEMENT REGARDLESS OF RANKS

	<h2>CIDO CREWTEAM INSTRUCTION</h2>	DOC NO.: IDT-CMMD – 06 REVISION NO: 2017-11
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4. PROMOTION STANDARD

CURRENT RANK		PROMOTING RANK	MIN. CAREER OF EX-RANK	REQUIREMENT	APPROVAL
C/O & 1/E	->	CAPT & C/E	30 MONTHS	1. HIGHER CERTIFICATE/LICENSE 2.RECOMMENDATION LETTER BY RE-HIRED CAPTAIN/CE 3. ONBOARD PROMOTION (WHEREVER POSSIBLE) 4.EVALUATION ANALYSIS REPORT (IF ON VESSEL, BY ONBOARD CAPTAIN/CE) -IF CANDIDATES IN MANILA, LET HIM GO THROUGH F2F INTERVIEW BY CIDO CSQ INSTRUCTOR(DAGAAS/MAYO)	CIDO
2/O & 2/E	->	C/O & 1/E	24 MONTHS		CIDO
3/O & 3/E	->	2/O & 2/E &E/E	12 MONTHS		CIDO
AB & OLR	->	3/O & 3/E & FTR	12 MONTHS		CIDO
OS & WPR	->	AB & OLR	12 MONTHS		CIDO
MSM	->	C/CK	30 MONTHS		CIDO

5. CREW APPROVAL-THROUGH CEMS APPROVAL

RANK	REQUIREMENT	APPROVAL
NEW CAPT & C/E	1. CREW LIST	CIDO
NEW C/O & 1/E	2. H/C 3. INTERVIEW CHECKLIST 4. EVALUATION ANALYSIS 5. BODY PICTURE 6. EVALUATION RECORD OF LAST COMPANY 7. MEDICAL REPORT	CIDO
RE-HIRE TOP4	1. CREW LIST 2. H/C 3. BODY PICTURE 4. MEDICAL REPORT	CIDO
NEW JUNIOR AND RATINGS	1. CREW LIST 2. H/C 3. INTERVIEW CHECKLIST 4. BODY PICTURE 5. EVALUATION RECORD OF LAST COMPANY 6. MEDICAL REPORT	CIDO
RE-HIRE JUNIOR AND RATINGS	1. CREW LIST 2. H/C 3. BODY PICTURE 4. MEDICAL REPORT	CIDO

- A) EVALUATION ANALYSIS MIN.REQUIREMENT IS 70 FOR ALL TOP4 RANKS
- B) INTERVIEWER/EVALUATOR SHOULD GET OWNERS' APPROVAL FOR HIS QUALIFICATION : MIN.QUALIFICATION: MORE THAN 1YEAR EXP AS CAPT/CE OR 3YEARS AS MANNING MANAGER/INTERVIEWER
- C) PEME: SEE NO.9 BELOW
- D) **FOR PROMOTING TOP4 AND NEW TOP 4, IT IS REQUIRED FOR THEM TO HAVE F2 F INTERVIEW BY CIDO CSQ INSTRUCTOR(CAPT DAGAAS/CE ARADA)**



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F-8 INSTRUCTION FOR MANNING AGENT

6. CREW REPLACEMENT

- 1) **WHERE:** FAR EAST/SINGAPORE REPLACEMENT AS GROUP(NOT ONLY 1 OR 2 CREW):
MAKE REPLACEMENT PLAN AHEAD TO CONTROL CREW BUDGET
- 2) **WHEN:** UPON EXPIRY OF CONTRACT OR EVEN BEFORE EXPIRY
CONSIDERING VESSEL PORT SCHEDULE(FOR EXAMPLE, 7 MONTHS
AND CALLING SINGAPORE BUT VSL GOING TO GO EUROPE→→
REPLACE CREW EVEN BEFORE 8 MONTHS WHERE AS POSSIBLE)

***NEVER STAY ON BOARD MORE THAN 12 MONTHS**

(NOT EVEN ANY SINGLE DAY ALLOWED)

- 3) **HOW:** REPLACE CREW WITH UNDER LOCAL AGENT
- 4) **AFTER REPLACEMENT: UPDATE CEMS CREWLIST BY CEMS WITHIN 2DAYS**

PLACE	AGENT	E-MAIL	PHONE	ETC
PYUNGTAEK	DOORI SHIPPING	doori@dooriship.co.kr	OFF:(82) 31 683 9042 CELL:(82) 10 3723 2563	
INCHON	MASTER SHIPPING	master@mastership.co.kr gomasterinchon@hanmail.net	OFF:+ 82-32-8870-600	
ULSAN	BRIGHT MARINE	agency@brightmarine.com	OFF:(82) 52 256 1535 MOB:(82) 010 4589 5377	
BUSAN/ CHISEPO	CHUNG WOO	cwshipping@cwshipping.co.kr agency@cwshipping.co.kr	OFF: (82)-51-441-1044 MOB:(82)-10-9332-7057	

OTHER PORTS IN KOREA	CHRTRS AGENT UNLESS INSTRUCTED OTHERWISE			
JAPANESE PORTS IN TOKYO BAY	FS MARITIME	marine@fsmaritime.co.jp	OFF: +81-03-3685-3175	
OTHER JAPANESE PORTS	UNITRANS	msg_unitrans@unitrans- service.co.jp	OFF:+81-52-659- 1878/1879	
SINGAPORE	OREXIS	shipagency@orexis.com.sg	MOB:+65 9663 7028	
OTHER COUNTRY	WSS KOREA (COORDIN ATOR)	Hahn.Kang@wilhelmsen.com WSS-KOREA- GLOBALAGENT@wilhelmsen .com	OFF: +82 2 720 4111 Mob:+82 10 4924 0602	NEED CIDO CONFIRM

- 5) OTHER
- A. CAPT AND C/E NOT SAME TIME REPLACEMENT
 - B. CAPT AND C/O NOT SAME TIME REPLACEMENT
 - C. C/E AND 1/E NOT SAME TIME REPLACEMENT
 - D. NOT 3 CREW SAME TIME REPLACEMENT IN EACH PART
i.e.) Avoid [CAPT, 2/O, 3/O] or [3AB] or [1/E,2/E,3/E] or [3OLR]
- 6) **LET MASTER REQUEST VACATION REQUEST AT LEAST ONE AND HALF MONTH BEFORE.**
AND CREW MANAGER REVIEW IT AS PER No.6
7. **CREW MANAGEMENT**
- 1) SHOULD REPORT WEEKLY REPORT:
 - A. CREW CHANGE PLAN AND RESULT
 - B. STAND-BY CREW INFORMATION(INCLUDING CREWLST OF RESIGNED)
 - 2) PROPOSE CANDIDATES TO SHIOWNERS AT LEAST 15DAYS BEFORE EXPECTED CREW CHANGE DATE.
 - 3) RELATIVES CAN NOT STAY ON THE SAME VESSEL WITHOUT OWNERS APPROVAL



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8. CREW CERTIFICATE

- 1) Agent must make all crew have valid crew certificates on board including below.
 - a. Deck officers: BRM Ecdis Generic Ecdis(Furuno)
 - b. Engine officers: ERM
 - c. Ratings(Must have new cert. comply to STCW convention for new rating grades)
 - d. In case of crew not having all required cert as per VSL-375, crew not allowed to go on board.
- 2) Agent must guarantee Authentication of Crew Certificates and it would be also checked by Cido during annual audit

9. Crew medical and health

- 1) For embarkation, all crew must have valid medical cert from company nominated clinic(need remaining at least 1.5 years of validity)
- 2) Followings are required age for enhanced medical examination: Full Enhanced medical report must be sent to Cido for final approval.

	FILIPINO	CHINESE	MYANMAR	KOREAN
ENHANCED MEDICAL CHEK	TOP4 OVER 45	TOP4	OVER45	OVER 55 YEARS OLD

*Period: Every 1 year basis(no need to conduct another medical check if he had an enhanced medical check recent 9 months before)

- 3) **BMI requirement:** Only crew to meet below requirement allowed to hire – Effective from Sep 23rd 2016.

(For rejoin crew, giving a period of grace for 1 year)

Age	Acceptable BMI	Remark
Over 50	Under 27	In case of crew shortage, Crew manager (Cido) might give some exception considering career and evaluation.
Under 50	Under 30	

*If crew has valid enhanced medical report, Cido consider giving more allowance over the BMI

4) Smoking and Drinking

- a. For new crew, do not recruit crew smoking but in case of crew shortage Agent can hire when crew submit a written oath planning how he would quit smoking
- b. Crew Not allowed to drink Whiskey, Cognac, Soju and suchlike strong drinks while entire his service on board
(Strong drink only can be served when Master allowed : Master must make a record for its consumption who and when to provided)

Appendix D: Standard For Selection of New Personnel

Table. 2-2 Standard for selection of new personnel

Classification	Rank	License according to GRT			License according to engine KW				Age	Needed minimum career		
		Over 6,000	Over 1,600	Under 1,600	Over 6,000	Under 3,000 ~ 6,000	Under 1,500 ~ 3,000	Under 1,500		Tanker career (year)	OIL& CHEMICAL career (year)	OIL& CHEMICAL career of relevant rank(year)
Officer & Engineer	Master	1 st	2 nd	3 rd	X				Under 60	4	3.5	2
	C/O	2 nd	3 rd	4 th					Under 55	3	2.5	1.5
	2/O	3 rd	4 th	5 th					Under 45	1	1	1
	3/O	4 th	4 th	5 th					Under 40	0.5	0.5	N/A
Engineer	C/E	X			1 st	2 nd	3 rd	4 th	Under 60	4	3.5	2
	1/E				2 nd	3 rd	4 th	5 th	Under 55	3	2.5	1.5
	2/E				3 rd	4 th	5 th	5 th	Under 45	1	1	1
	3/E				4 th	5 th	5 th	5 th	Under 40	0.5	0.5	N/A
Ratings	BSN	X			X				Under 60	3	3	2
	OLR1								Under 50	1	1	1
	C/S								Under 50	1	1	1
	AB,Oiler, Cook OS, Wiper								Under 45	2	2	1
	Apprentice								Under 35	Not applicable		
									Under 30	Not applicable		

Appendix E: Collective Bargaining Agreement (CBA) between Netherland Maritime Employers Association (NEMEA) and the Indonesian Seafarers Union

COLLECTIVE BARGAINING AGREEMENT

between

NETHERLANDS MARITIME EMPLOYERS ASSOCIATION (NEMEA)

Hereinafter referred to as the SHIPOWNERS ASSOCIATION, on the one side

and

KESATUAN PELAUT INDONESIA (INDONESIAN SEAFARERS' UNION)

NAUTILUS INTERNATIONAL

Hereinafter referred to as the UNIONS, on the other side

Valid from: January 1st 2019



**COLLECTIVE BARGAINING AGREEMENT FOR INDONESIAN OFFICERS AND RATINGS
ON BOARD NETHERLANDS FLAG VESSELS**

This Agreement is made and entered into at Jakarta, Indonesia, this 27th day of October 2018 by and between:

Netherlands Maritime Employers Association (NEMEA), herein referred to as the "SHIPOWNERS ASSOCIATION", on behalf of their members, each member herein referred to as the "COMPANY". It is understood that "COMPANY" means: a member of the SHIPOWNERS ASSOCIATION with whom or on whose behalf the officer or rating has his employment agreement

-AND-

KESATUAN PELAUT INDONESIA, an affiliate of ITF, Labour Organization duly registered with the Ministry of Manpower, number: 09/OP.GSP.KPI/DFT/BW/ VIII/1998 and the registration evidence number: 36/I.N.V/2001, and duly registered under No. 30/89 (No. C2-4555.HT.01.03 TH 89) at the Department of Justice of the Republic of Indonesia, herein represented by its President **PROF. DR. MATHIUS TAMBING M. Si** and Secretary General **I DEWA NYOMAN BUDIASA**, with principal office at Jl. Cikini Raya No. 58 AA/BB Jakarta Pusat, Indonesia, and NAUTILUS INTERNATIONAL with principal office at Schorpioenstraat 266, 3067 KW, Rotterdam, Netherlands, herein represented by its Executive Officer **MARCEL VAN DEN BROEK**, hereinafter referred to as the "UNIONS".

WITNESSETH: THAT

WHEREAS, the UNIONS are the sole and exclusive representatives of all Indonesian seafarers for the purposes of Collective Bargaining Agreement on board the Netherlands Shipowners Association member's Netherlands Flagged vessels;

WHEREAS, it is desire of the parties to this Agreement to promote and maintain harmonious relations between the COMPANY and the UNIONS based on mutual respect of rights which will serve the best interest of all concerned ;

NOW THEREFORE, for and in consideration of the above premises and of the following covenants and conditions, the SHIPOWNERS ASSOCIATION and the UNIONS agree as follows :

Article I: UNION SECURITY

1. The SHIPOWNERS ASSOCIATION and the COMPANY recognize the UNIONS as the sole and exclusive Collective Bargaining representatives of all Indonesian officers and ratings on board vessels.
2. All officers and ratings covered by this Agreement employed from Indonesia on board any vessel owned, chartered or operated by the COMPANY shall as a condition of their employment, be members of the UNION and maintain their membership-in-good standing in accordance with the Constitution and By Laws of the UNION.
3. The COMPANY agrees that the officers and ratings who may be employed after the signing of this Agreement, shall be drawn/selected from among the qualified members in the UNION and upon employment on board any vessel all such officers and ratings shall maintain their membership-in-good standing in accordance with the Constitution and By Laws of the UNION as a condition of their continued employment with the COMPANY.

Article II: APPLICATION

1. The COMPANY and the UNIONS agree to perform and fulfil the terms and conditions in the Collective Bargaining Agreement.
2. The COMPANY in entering into this Agreement hereby recognizes the UNIONS as the sole Collective Bargaining parties for Indonesian masters, officers and ratings employed aboard all vessels owned or operated by the COMPANY. For the purpose of this Collective Bargaining Agreement the word "officer" also includes the master.

Appendix F: Standard English Competency TOEFL, IELTS, and other requirements

8/15/24, 9:15 PM
Exams to Study in Sweden: IELTS, TOEFL and Other Requirements

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Exams to Study in Sweden: IELTS, TOEFL and Other Requirements

Veda Burman

There are many universities in Sweden for international students, out of which almost all of them have similar entry requirements. To study in Sweden, students should keep in mind the general entry requirements of the chosen university as well as the program-specific entry requirements. When the student is ready to apply, they can use the Swedish Council of Higher Education's website to apply for admission to Swedish universities.

The specific requirements for university admission in Sweden will be mentioned on the university website. Some of the most popular English proficiency test scores accepted for admission to the top universities in Sweden includes IELTS, TOEFL, PTE and others.

English Proficiency Exams to Study in Sweden

University admissions in Sweden require all international students to demonstrate certain English language proficiency test scores to qualify for the university of their choice. They are as follows:

IELTS Requirements for Sweden Universities

To get into the top universities in Sweden, international student should qualify the International English Language Testing System for universities in Sweden. The minimum IELTS scores and their sectional scores are provided below:

- English 5: Band of 5.5. No section should be below 5.0
- English 6: Band of 6.5. No section should be below 5.5
- English 7: Band of 7.0. No section should be below 6.0

TOEFL Requirements for Sweden Universities

In order to take part in the most sought-after courses in Sweden, a student should qualify the minimum Test of English as a Foreign Language or TOEFL requirements for Sweden universities.

Exam Type/ Requirement	Paper Based	Internet Based
English 5	Score: 4.0	Score: 17
	Scale: 1-6	Scale: 0-30
	Total Score: 530	Total Score: 72
English 6	Score: 4.5	Score: 20
	Scale: 1-6	Scale: 0-30
	Total score: 100	Total Score: 90
English 7	Score: 4.5	Score: 20
	Scale: 1-6	Scale: 0-30
	Total score: 600	Total score: 100

Note: To study in Sweden, TOEFL examinee score records are not taken into consideration. Students need to verify their TOEFL results before applying to universities in Sweden. If this is not the case, their admission will not be accepted.

Cambridge Michigan Language Assessments Requirements to Study in Sweden

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Swedi Scien
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Uppsala
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<https://collegedunia.com/sweden/article/exams-to-study-in-sweden-ielts-toefl-and-other-requirements>
1/3

To get into the top universities in Sweden for international students, they need to have:

- Cleared MELAB (Michigan English Language Battery) for English 5, with a minimum score of 85
- Cleared MELAB (Michigan English Language Assessment Battery) for English 6, with a minimum score of 90

PTE Requirements to Study in Sweden

PTE is a widely accepted exam required to study in Sweden. The details of PTE scores are as follows:

- For English 5: Minimum score 68 and writing score 61
- For English 6: Minimum score 82 and writing score 61
- For English 7: Minimum score 47

Students should make a note that their test results should be verified, else they will not be admitted in the universities in Sweden.

Cambridge ESOL Examinations

- For English 5: Cambridge first certificate in English with grades A, B or C/ B2 First (FCE)
- For English 6: Cambridge English: Advanced/ C1 Advanced (CAE)/ Cambridge ESOL level 2 certificate
- For English 7: Cambridge English, Certificate of Proficiency in English/ C2 Proficiency (CPE)

Study in Sweden: Preparation for Bachelor's Courses

There are two major types of Bachelor's degree to study in Sweden. They are as follows.

Degree	Duration	Credit courses
University Diploma (Högskoleexamen)	2 years	120 higher education credit courses
Degree of Bachelor (Kandidatexamen)	3 years	180 higher education credit courses

Universities in Sweden for international students take in students to study in the bachelor's courses if the student has:

- Has completed secondary school qualification
- Has a minimum proficiency in English. The requirement is same as the Swedish upper secondary course: English 6/English B

If a student fails to have previous university qualifications, they are required to submit their high school qualification. Some universities in Sweden for international students offer seats to students depending on their high school qualification and not university qualification.

Study in Sweden: Preparation for Masters Courses

The requirements to study master's courses in the universities in Sweden for international students are:

- The student must have a Bachelor's degree from a university which is internationally recognized. This is the same as a Swedish Kandidatexamen.
- The applicants should be proficient enough in English. They must have qualified internationally recognized qualifications like IELTS or TOEFL scores.

Study in Sweden: Preparation for Ph.D. Courses

Universities in Sweden for international students are known extensively for their research. This is one of the reasons as to why Sweden is becoming an increasingly popular study abroad destination. To study Ph.D./Doctorate courses in Sweden a student must have:

- Student must have a university degree equivalent to a bachelor's degree or a master's degree with emphasis on the same subject that the student wishes to do his research on.
- Previous university thesis where the student has done some independent research
- Should be proficient in English. Some universities in Sweden for international students also require students to have basic Swedish skills, where seminars and lectures are conducted in Swedish.

Admission Requirements for Top Universities in Sweden?

To get into the universities in Sweden for international students need to make sure that they take part in additional learning methods and not simply the qualifying exams. Following are the ways that student can do this:

- Preparatory courses: These are the kind of courses that a student can undertake before he or she seeks admission in a bachelors or a master's course in Sweden. Examples of such courses are: Pre-MBA courses, Pre-medicine courses or Pre-law courses.

Appendix G: Conversion Table TOEFL IBT, PBT, CBT, and IELTS test

□ TOEFL IBT	↕ TOEFL PBT	↑ THE EDGE TOEFL CBT	↕ IELTS	↕ TOEIC	↕
61	500	173	6.0	575	
62	503	176	6.0	580	
63	505	178	6.0	590	
64	507-510	180	6.0	600	
65	513	183	6.0	605	
66	516	186	6.0	610	
67	518	188	6.0	615	
68	520	190	6.0	620	
69	523	192	6.0	630	
70	525	194	6.0	635	
71	527-530	197	6.0	640	
72	532	199	6.0	645	
73	534	201	6.0	655	
74	536	203	6.0	660	
75	538	205	6.0	665	
76	540-543	207	6.0	670	
77	544	209	6.0	675	
78	546	211	6.0	680	
79	548	212	6.5	685	
80	550	214	6.5	690	
81	552	216	6.5	700	
82	554	218	6.5	705	
83	557-560	220	6.5	715	
84	562	222	6.5	720	
85	564	224	6.5	725	
86	566	225	6.5	730	
87	568	227	6.5	740	
88	570	229	6.5	745	

Appendix H: Government Agency Performance Report of The Human Resources Development Agencies on Transportation Indonesia 2022

Tabel 3.5 Penyerapan Lulusan Diklat Transportasi Pembentukan pada Tahun 2019-2022

NO	UNIT KERJA	2019					2020				
		JUMLAH LULUSAN	TERSERAP PEMERINTAH	TERSERAP NON-PEMERINTAH	SISA	%	JUMLAH LULUSAN	TERSERAP PEMERINTAH	TERSERAP NON-PEMERINTAH	SISA	%
1	SDM Transportasi Darat & KA	834	450	190	15	97,63	718	406	175	137	80,92
2	SDM Transportasi Laut	3.006	399	2.491	77	96,08	3.101	247	2.276	638	79,82
3	SDM Transportasi Udara	938	316	605	217	70,87	983	247	237	634	48,24
TOTAL		4.580	974	3.256	309	92,36	4.862	900	2.888	1.409	71,80

NO	UNIT KERJA	2021					2022				
		JUMLAH LULUSAN	TERSERAP PEMERINTAH	TERSERAP NON-PEMERINTAH	SISA	%	JUMLAH LULUSAN	TERSERAP PEMERINTAH	TERSERAP NON-PEMERINTAH	SISA	%
1	SDM Transportasi Darat & KA	880	616	312	352	82,73	981	767	81	133	86,44
2	SDM Transportasi Laut	3.160	42	2.025	1.095	85,41	3.151	268	1.938	939	70,01
3	SDM Transportasi Udara	1.156	202	188	766	33,74	1.440	626	171	651	55,00
TOTAL		5.196	860	2.325	2.011	61,30	5.581	1.661	2.190	1.723	65,06

Bila dilihat dari realisasi penyerapan lulusan untuk semua mata tidak mencapai target yang telah ditetapkan karena adanya pandemi COVID-19 yang menyebabkan penurunan pertumbuhan ekonomi di Indonesia maupun dunia dimana sedikitnya lowongan pekerjaan yang tersedia maupun adanya PHK di beberapa perusahaan.

Untuk SDM Transportasi Udara yang capaiannya paling rendah, disebabkan oleh beberapa hal, yaitu:

- 1) Sebagian besar perusahaan penerbangan dan stake holder kementerian Perhubungan (mata udara) sedang mengalami kendala Finansial dikarenakan kondisi covid 19 yang berkepanjangan yang berimbas langsung ke dunia transportasi udara khususnya penerbangan dimana mereka membatasi, bahkan tidak membuka rekrutmen bagi lulusan baru;

Appendix I: Annual Report of The Human Resources Development Agencies on Transportation Indonesia 2022

Jumlah realisasi peserta program pendidikan pembentukan di UPT SDM Perhubungan Laut Tahun 2022 sebesar 88,96% atau sebanyak 14.814 orang dari target sebesar 16.652 orang. Untuk realisasi lulusan sejumlah 2.759 orang dari target 3.357 orang atau 82,19%. Adapun rincian target dan realisasi peserta dan lulusan Diklat Pembentukan tiap UPT sebagaimana terlihat pada tabel 2.9 berikut :

Tabel 2. 9 Target dan Realisasi Diklat Pembentukan SDM Perhubungan Laut Tahun 2022

NO	SATKER	PESERTA (Orang)		%	LULUSAN (Orang)		%
		TARGET	REALISASI		TARGET	REALISASI	
1	STIP	2.360	1.815	76,91%	472	469	99,36%
2	BP3IP	192	126	65,63%	192	0	0%
3	PIP Semarang	2.333	2.196	94,13%	376	376	100%
4	PIP Makassar	2.752	2.811	102,14%	621	668	107,57%
5	Poltekpel Surabaya	1.904	2.211	116,12%	181	345	190,61%
6	Poltekpel Banten	2.559	1.313	51,31%	484	241	49,79%
7	Poltekpel Barombong	1.643	1.849	112,54%	318	226	71,07%
8	Poltekpel Sorong	931	693	74,44%	192	115	59,90%
9	Poltekpel Malahayati	746	746	100%	151	151	100%
10	Poltekpel Sulawesi Utara	312	312	100%	160	0	0%
11	Poltekpel Sumatera Barat	920	742	80,65%	210	168	80%
JUMLAH		16.652	14.814	88,96%	3.357	2.759	82,19%

Sumber Data : Pusat Pengembangan SDM Perhubungan Laut

Pada BP3IP Jakarta dan Poltekpel Sulawesi Utara di tahun 2022 masih belum ada lulusan Diklat Pembentukan karena program studi untuk Diklat Pembentukan baru menerima taruna pertama pada tahun 2021 dan direncanakan lulus pada tahun 2024

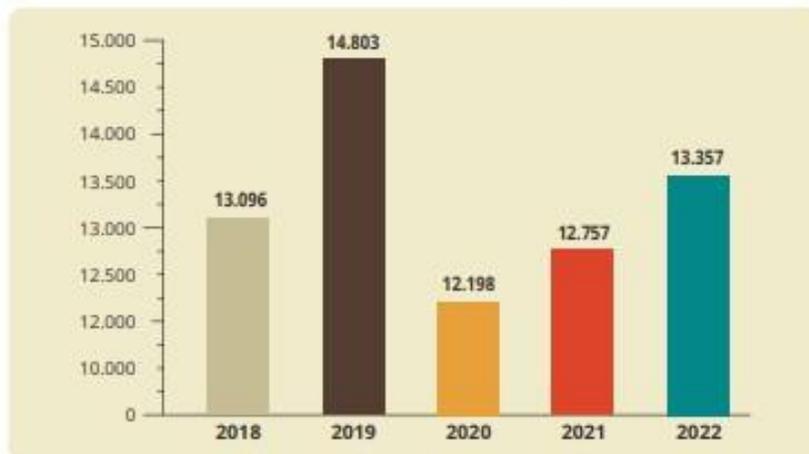


Appendix J: Annual Statistical Report of The Center of Human Resources Development on Sea Transportation Indonesia 2022

Tabel 2.4 Jumlah Peserta Diklat Pembentukan 5 Tahunan

NO	SATKER	2018		2019		2020		2021		2022	
		L	P	L	P	L	P	L	P	L	P
1	STIP	1.415	200	1.501	213	1.380	290	1.582	306	1.511	304
2	PIP SEMARANG	1.829	204	1.490	170	1.583	83	1.941	125	2.091	105
3	PIP MAKASSAR	2.056	264	2.564	292	2.832	157	1.320	224	1.451	249
4	POLTEKPEL SURABAYA	1.326	80	1.837	155	1.595	195	1.952	281	1.888	323
5	POLTEKPEL SUMBAR	339	17	545	42	485	42	467	94	639	142
6	POLTEKPEL BAROMBONG	1.370	17	2.408	17	1.598	69	1.418	-	1.114	711
7	POLTEKPEL BANTEN	2.759	56	1.959	56	862	35	1.124	98	952	129
8	POLTEKPEL SORONG	211	37	424	24	392	66	519	108	538	156
9	POLTEKPEL MALAHAYATI	601	45	698	34	352	16	997		729	17
10	POLTEKPEL SULUT	270	-	374	-	161	5	179	22	256	52
JUMLAH		12.176	920	13.800	1.003	11.240	958	11.499	1.258	11.169	2.188
TOTAL		13.096		14.803		12.198		12.757		13.357	

Grafik 2.4 Jumlah Peserta Diklat Pembentukan 5 Tahunan



Secara umum pada tahun 2022, secara keseluruhan Satker/UPT Pendidikan Tinggi dan Balai Diklat Matra Laut mengalami kenaikan peserta diklat pembentukan. Pertumbuhan rata-rata jumlah peserta diklat pembentukan matra laut tahun 2018 - 2022 adalah sebesar 1,18%, sedangkan dari tahun 2020 - 2022 masih terjadi pertumbuhan sebesar 4,75%.

Appendix K: The list of number of national flagged vessels in Indonesia

DATA KAPAL TERDAFTAR DI INDONESIA S/D JUNE 2024

Jenis	Jumlah	Total GT
Kapal Penumpang	5.370	2.581.971
Kapal Ikan	53.813	2.617.583
Kapal Barang	47.491	51.775.139
Total	106.674	56.974.693

Jenis	Range	Jumlah	Total GT
Kapal Penumpang	GT. 7 - 174	4.127	201.581
	GT. 175 - 499	547	165.876
	>=500	696	2.214.514
Total		5.370	2.581.971

Jenis	Range	Jumlah	Total GT
Kapal Ikan	GT. 7 - 29	29.698	575.895
	GT. 30 - 99	18.225	942.881
	GT. 100 - 299	5.411	844.912
	>=300	479	253.895
Total		53.813	2.617.583

Jenis	Range	Jumlah	Total GT
Kapal Barang	GT. 7 - 174	24.064	1.630.276
	GT. 175 - 499	9.775	2.666.592
	>=500	13.652	47.478.271
Total		47.491	51.775.139

Appendix L: The Memorandum of Agreement Between Surabaya Maritime Polytechnic and Indonesian Directorate General of Sea Transportation



PERJANJIAN KERJA SAMA
ANTARA
BADAN LAYANAN UMUM POLITEKNIK PELAYARAN SURABAYA
DAN
DIREKTORAT JENDERAL PERHUBUNGAN LAUT
TENTANG
PEMANFAATAN ASET BADAN LAYANAN UMUM KAPAL LATIH
BUNG TOMO UNTUK PENYELENGGARAAN KEGIATAN PELAYANAN PUBLIK
KAPAL PERINTIS

NOMOR: HK. 201 / 1 / 16 / POLTEKPEL. SBT - 2024
NOMOR: HK. 201 / 1 / 16 / DJPL / 2024

Pada hari ini, Senin, tanggal Dua Puluh Sembilan, bulan Januari, tahun Dua Ribu Dua Puluh Empat (29-01-2024), yang bertanda tangan di bawah ini:

1. **BADAN LAYANAN UMUM POLITEKNIK PELAYARAN SURABAYA**, berkedudukan Jl. Gunung Anyar Boulevard No. 1, Surabaya dalam hal ini diwakili oleh Moejiono, M.T., M.Mar.E., sebagai Direktur Politeknik Pelayaran Surabaya, berdasarkan Keputusan Menteri Perhubungan No. SK 5479 Tahun 2023 tanggal 20 Oktober 2023 tentang Pemberhentian dan Pengangkatan dari dan dalam jabatan di lingkungan kementerian perhubungan atas nama sudara Moejiono, M.T., M.Mar.E. NIP 19721214 200212 1 001 sebagai Direktur Politeknik Pelayaran Surabaya dalam hal ini bertindak untuk dan atas nama Politeknik Pelayaran Surabaya, selanjutnya disebut **PIHAK PERTAMA**; dan
2. **DIREKTORAT JENDERAL PERHUBUNGAN LAUT**, berkedudukan di Jalan Medan Merdeka Barat Nomor 8, Jakarta Pusat dalam hal ini diwakili oleh Dr. Capt. Antoni Arif Priadi, M.Sc., sebagai Direktur Jenderal Perhubungan Laut Kementerian Perhubungan bertindak dalam jabatannya tersebut untuk dan atas nama Direktorat Jenderal Perhubungan Laut Kementerian Perhubungan berdasarkan Keputusan Presiden Republik Indonesia Nomor 158/TPA Tahun 2023 tanggal 31 Oktober 2023 tentang Pemberhentian dan Pengangkatan dari dan Dalam Jabatan Pimpinan Tinggi Madya di Lingkungan Kementerian Perhubungan, selanjutnya disebut **PIHAK KEDUA**.

12. Peraturan Menteri Perhubungan Republik Indonesia Nomor PM 55 Tahun 2019 tentang Komponen Biaya dan Pendapatan Yang Diperhitungkan Dalam Kegiatan Pelayanan Publik Kapal Perintis (Berita Negara Republik Indonesia Tahun 2019 Nomor 916);
13. Peraturan Menteri Perhubungan Republik Indonesia Nomor PM 110 Tahun 2021 tentang Organisasi dan Tata Kerja Politeknik Pelayaran Surabaya (Berita Negara Republik Indonesia Tahun 2021 (Berita Negara Republik Indonesia Tahun 2021 Nomor 1592);
14. Peraturan Menteri Perhubungan Nomor 17 Tahun 2022 tentang Organisasi dan Tata Kerja Kementerian Perhubungan (Berita Negara Republik Indonesia Tahun 2022 Nomor 815);
15. Peraturan Menteri Perhubungan Republik Indonesia Nomor PM 7 Tahun 2023 tentang Tarif Angkutan Laut Perintis (Berita Negara Republik Indonesia Tahun 2023 Nomor 336).

PASAL 2

MAKSUD DAN TUJUAN

- (1) Maksud Perjanjian Kerja Sama ini adalah sebagai landasan hukum bagi **PARA PIHAK** dalam pelaksanaan Perjanjian Kerja Sama Pemanfaatan Aset Kapal Latih Bung Tomo milik **PIHAK PERTAMA** oleh **PIHAK KEDUA** guna Penyelenggaraan Kegiatan Pelayanan Publik Kapal Perintis.
- (2) Tujuan Perjanjian Kerja Sama ini adalah dalam rangka Pemanfaatan Aset Kapal Latih Bung Tomo milik **PIHAK PERTAMA** oleh **PIHAK KEDUA** guna Penyelenggaraan Kegiatan Pelayanan Publik Kapal Perintis, serta mengoptimalkan daya guna dan hasil guna aset milik **PIHAK PERTAMA**.

PASAL 3

OBJEK PEMANFAATAN ASET

Objek Perjanjian Kerja Sama ini adalah aset milik **PIHAK PERTAMA** berupa 1 (satu) unit Kapal Latih Bung Tomo untuk digunakan oleh **PIHAK KEDUA** dalam rangka Penyelenggaraan Kegiatan Pelayanan Publik Kapal Perintis sebagai Kapal Perintis Milik Negara (selanjutnya disebut "**Objek Perjanjian Kerja Sama**").

PASAL 4

HAK DAN KEWAJIBAN

- (1) Hak **PIHAK PERTAMA**:
 - a. Dapat bekerja sama dengan pelaksana Penyelenggaraan Kegiatan Pelayanan Publik Kapal Perintis untuk mengusulkan penempatan awak kapal pada objek pemanfaatan aset;
 - b. Dapat menempatkan peserta diklat kepelautan untuk melaksanakan pembelajaran dan/atau diklat di atas kapal selama melaksanakan Penyelenggaraan Kegiatan Pelayanan Publik Kapal Perintis sebagai Kapal Perintis Milik Negara;

Appendix M: The list of STCW parties that have communicated demonstrated it was giving full and complete effect to the relevant provision of the convention STCW 1978 as amended

ANNEX

Parties to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978, confirmed by the Maritime Safety Committee to have communicated information which demonstrates that full and complete effect is given to the relevant provisions of the Convention

Albania	Guatemala	Papua New Guinea
Algeria	Honduras	Peru
Antigua and Barbuda	Hungary	Philippines (the)
Argentina	Iceland	Poland
Australia	India	Portugal
Azerbaijan	Indonesia	Qatar
Bahamas (the)	Iran (Islamic Republic of)	Republic of Korea (the)
Bahrain	Ireland	Romania
Bangladesh	Italy	Russian Federation (the)
Barbados	Israel	Saint Vincent and the Grenadines
Belgium	Jamaica	Samoa
Belize	Japan	Saudi Arabia
Bolivia (Plurinational State of)	Jordan	Senegal
Brazil	Kazakhstan	Serbia*****
Brunei Darussalam	Kenya	Seychelles
Bulgaria	Kiribati	Singapore
Cambodia	Kuwait	Slovakia
Canada	Latvia	Slovenia
Cabo Verde	Lebanon	Solomon Islands
Chile	Liberia	South Africa
China*	Lithuania	Spain
Colombia	Luxembourg	Sri Lanka
Comoros (the)	Libya	Sweden
Cook Islands (the)	Madagascar	Switzerland
Côte d'Ivoire	Malaysia	Syrian Arab Republic
Croatia	Malawi	Thailand
Cuba	Maldives	Togo
Cyprus	Malta	Tonga
Czech Republic	Marshall Islands (the)	Trinidad and Tobago
Democratic People's Republic of Korea (the)	Mauritania	Tunisia
Denmark**	Mauritius	Turkey
Dominica	Mexico	Tuvalu
Ecuador	Micronesia (Federated States of)	Ukraine
Egypt	Montenegro*****	United Arab Emirates (the)
El Salvador	Morocco	United Kingdom of Great Britain and Northern Ireland (the)****
Eritrea	Mozambique	United Republic of Tanzania (the)
Estonia	Myanmar	United States (the)
Ethiopia	Netherlands (the)***	Uruguay
Fiji	New Zealand	Vanuatu
Finland	Nigeria	Venezuela (Bolivarian Republic of)
Finland	Norway	Viet Nam
France	Oman	
Georgia	Pakistan	
Germany	Palau	
Ghana	Panama	
Greece		