# Understanding the Plight and Challenges Facing South African Seafarers

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## Abstract

The issue of seafarer placement has been continually raised in the context of South African seafarers. Because of the limited domestic shipping reach, South African seafarers have had to rely upon the international merchant navy for jobs and practical training. Given that the global supply of seafarers is close to 2million strong, the pool of South African cadets and seafarers must compete with the global supply pool for jobs and training. While the issue of training berths has been published, the sector has been shrouded in mystery, as very little has been reported about their experiences globally, their struggles and the opportunities available to them. In this study, the global backdrop has been provided, together with insights about their struggles and challenges. The paper ends with an assessment of their placement within the changing global shipping environment and the interventions required if they are to thrive and prosper in the changing global context.

## Keywords

Seafarers, Training Berths, Seafarer Placement, Global Seafarer Procurement

## 1. Background and Introduction

Global shipping has been greatly influenced by the development of open registries, which allow ships to fly under flags of convenience, rather than under domestic registration. The most popular and influential registries belong to Panama, Liberia, and Singapore (Gregory, 2012). As consumer demand for the lowest-cost products possible increased, the maritime logistics industry was impacted. The push for the lowest freight rates possible meant that shipowners had to find ways to reduce rates. Labour costs, as a changeable variable, meant that the shipping business needed avenues through which to pursue this goal. Open registries were deemed to be the answer as they allowed shipowners to circum-

vent the more stringent taxation, registration, and Labour regulations of the developed nations for the more permissive regimes. Open registries and flags of convenience, therefore, become necessary (Behnam, 2004). In 1998, for the first time since the acceptance of flags of convenience, most of the global fleet, 51.3 percent, sailed under flags of convenience (Alderton et al., 2002).

Given the motivation behind the formation of open ship registries, a question has been raised about the race to the bottom with regards the price of labour, as shipowners have the option of choosing from labour across the globe and are not bound by law to choose from their domestic seafarers (Zhao et al., 2005). According to the International Chamber of Shipping (ICS, 2022), China, the Philippines, Indonesia, the Russian Federation and Ukraine are estimated to be the five largest supply countries for all seafarers (officers and ratings). The Philippines is the biggest supplier of ratings, followed by China, Indonesia, the Russian Federation and Ukraine. China is the biggest supplier of officers, followed by the Philippines, India, Indonesia, and the Russian Federation (ICS, 2022). The latest ICS statistics show that the worldwide population of seafarers serving on internationally trading merchant ships is estimated at 1,647,500 seafarers, of which 774,000 are officers and 873,500 are ratings. The global demand for seafarers is estimated at 1,545,000, with the industry requiring approximately 790,500 officers and 754,500 ratings. This shows that the demand for officers has increased by around 24.1%, while the demand for ratings has increased by around 1.0%. The current supply-demand situation highlights a shortage of approximately 16,500 officers and a surplus of around 119,000 ratings.

There are no accurate figures regarding the number of South African seafarers, although figures range between 4500 and 6000 seafarers working in both the South African fleet (specifically Unicorn Shipping Line ships) and other global shipping lines. There are many factors that contributed towards the decrease in the number of South African seafarers employed on foreign vessels since the 1970s (Rugunan, 2005). The movement towards cheaper Asian and East-European labour is one of the contributing factors. Others include the sale of the Safmarine to Maersk, sanctions against South Africa by the global community, the previous apartheid education and training policies which allowed for only white officers and the current issues with unregulated training, which has resulted in very few training institutes producing seamen with globally recognised qualifications. Other problems relate to the placement of trainee seafarers on vessels so that they can complete their 12-month practical training and qualify as seafarers. (SAMSA, 2014) As global trade intensifies, competition is likely to increase amongst carriers, putting further pressure on carriers to decrease their wage bills. The increased automation of ships, downward pressure on seafarer wages, oversupply of ratings and the increased pressure on seafarers to increase the value which they provide is likely to further affect the position of South African seafarers. There is therefore a need to thoroughly investigate their position, to provide strategic interventions to assist them, going forward.

This paper begins with the rationale of the study, problem statement and research methodology before the literature review. While there are a few studies on the South African seafarers, none of these studies have focused on the international dimensions of the problems facing South African seafarers or the way in which the developments within the shipping sector are changing the face of seafarer recruitment. The developments in the shipping sector are discussed prior to the nature of the South African seafarer environment and the results of the seafarer survey. The paper concludes with an analysis of the global and domestic environment and recommendations.

## 2. Problem Statement

Increased world trade, greater competition between logistics providers and the demand by consumers for the lowest, most competitive prices, is likely to continue to place pressure on the cost of labour, especially that of ratings, who are deemed to be the biggest cost. The fact that ratings tend to be less skilled means that ship owners are most likely to continue to seek their services at low cost to them. This does not bode well for South African seafarers, especially ratings, who do not fit in with the current global seafarer procurement trends. Another issue facing South African seafarers is the difficulty in securing training berths and placements. The biggest issue facing our seafarers, however, is that of specialization. Given these issues, there is a real need to fully understand challenges faced by seafarers and determine strategic and practical solutions. More specifically, decisions need to be made about positioning South African seafarers during global economic challenges and post Covid19 pandemic recovery.

## 3. Rationale of the Study

The status of seafarers in the global context, the opportunities available together with the challenges they face, all highlight the importance of understanding the status of South African seafarers. This will enable proper plans to be made to prepare them for future opportunities and assist them overcome their current challenges. It will also highlight the areas that cannot be changed so that current interventions can be updated and redundant policies replaced with more relevant interventions. Where the plight of seafarers has been inadequately represented, through this study an accurate picture of the realities facing the South African seafaring community is provided.

## 4. Objectives

1) To identify and establish seafarers' baseline within South Africa.

2) To understand challenges facing South African seafarers, especially in terms of securing placement onboard seagoing merchant vessels.

3) To propose actions and interventions to be taken to assist seafarers in overcoming these difficulties.

## 5. Research Methodology

To complete this study a mixed methodology approach was adopted, with both primary and secondary data being sourced using a qualitative research approach.

Primary data was sourced via both questionnaire and telephonic interviews with seafarers, regulatory departments, procurement agencies and the International Transport Federation (ITF). Because of the Protection of Personal Information (POPI) Act provisions regarding the dissemination of personal information, the questionnaire was disseminated through collaboration with agencies with databases, ship captains, maritime chat groups and ship agencies. While 500 questionnaires were sent out, 65 responses from seafarers and shipping agencies were received. While this response rate was quite low, it can be attributed to the inability to reach seafarers at sea. Despite the low participation rate, the respondents were varied from different cities, companies and agencies as well as ratings, officers, cadets and experienced seafarers. Despite these differences, their responses were consistent and aligned with the information obtained through interviews with the seafarer governing bodies. To understand the global climate, shipping companies, procurement agencies and shipping unions were approached. Data was also collected through the latest international maritime reports.

To achieve the objectives of this research paper, the survey and desktop research sought to answer the following questions:

1) What is the status of South African seafarers on the global market?

2) What are the challenges faced by South Africa seafarers?

3) What is the educational/training status of South African seafarers in terms of globally accepted standards?

4) What are the transformative initiatives in place to ensure inclusivity and accessibility of the industry?

Data was analysed using a thematic approach and for the survey data a descriptive statistics approach was employed to draw trends from the data. Secondary data was sourced via desktop research, with the survey results being tested to ensure that the primary data sourced aligns with current industry trends and identify gaps.

## 6. Ethical Consideration

The provisions of the Protection of Personal Information (POPI)Act provide that all personal information be protected. Without the consent of the relevant party, information cannot be shared. In addition, all sensitive information must be protected and cannot be shared with third parties without permission.

Participation in all surveys and interviews was voluntary and all participants were required to provide consent to the use of their inputs.. Where participants refused to participate in the survey, their choice was respected. Information obtained was used only for the purpose of completing the survey and then archived, with the results of the survey being made available within MKI where the

information is relevant to similar research projects, all the MKI protocols being operational.

## 7. Literature Review

The traditional role played by seafarers has changed much over the past decades. This has contributed to the impact of open registries on the sourcing patterns of shipping companies, the demise of traditional employment patterns to more flexible short-term contracts, increased global competition and the impacts of automation on the traditional roles played by seafarers (Baum-Talmor & Kitada, 2022). Over the past decades, the roles played by seafarers and the skills required of seafarers have changed and are still changing. Positions like carpenters or radio officers no longer exist, while roles like electrical technicians and administrative officers now exist. In their survey on the impact of digitalisation on seafarers, Baum-Talmor and Kitada (2022) uncovered the following:

1) While the shipping industry is moving towards automated ships, it will be a while before the industry is overtaken by unmanned vessels.

2) Automation has changed the role of both ratings and officers, resulting in less staff carrying out more activities. Everyone on board is required to be multi-functional, with different and many skills being required.

3) Through automation, many physical tasks have been replaced, making work on board less physical and more paper based. Although jobs on board have become less physically onerous, seafarers are still reluctant to admit that tasks no longer require much physical strength and therefore, can be done by women as easily as men.

4) Officers and ratings spoke of the fact that they are now faced with multiple functions, with officers doing more paperwork and administrative tasks while deckhands are expected to work on tasks requiring more skills and higher levels of expertise.

5) Despite the increased seafarer skills requirements employers are not willing to contribute towards their upskilling. The onus and burden of increased education lies with the seafarer and their family.

6) In addition to the cost of continuous learning, seafarers are responsible for the continual renewal of their many compulsory certificates, which can be costly. Unfortunately, seafarers cannot afford to take long breaks from seafaring as this could affect their ability to find employment.

7) Young, inexperienced seafarers have difficulties finding placement on ships. Most ship owners prefer experienced seafarers.

8) With the increased automation of ships, the landscape of shipping is changing, as are the requirements of seafarers. This could influence the way that seafarers are chosen in the future and open opportunities for the most qualified seafarers.

These survey results are supported by Muslu (2020) in his discussion of the changing face of human resources in the light of automation and the response of

the shipping sector to climate change challenges. According to Muslu, the demand for seafarers will be directed to people who can use and produce more specialized smart technologies. Maintenance of these seafarers will depend on how much of the human resources management philosophy can be achieved. With increased automation, he referred to three main challenges facing the human resource team. These include the following:

1) With increased automation, there is a shrinking in the number of seafarers required. This is already evident on megaships, where crew sizes have decreased from between 40 and 50 to between 25 and 15.

2) Increased automation leads to the requirement of different skill sets.

3) As the skills required become more digital, the shipping industry may find itself competing with other maritime sectors for skilled labour.

The types of skills required will need to align with the changes being made to ships. As ships become more sophisticated and mechanized, the role of the seafarer will change. The most attractive seafarer will be one with an understanding of software, programming, artificial intelligence, robotics technology and engineering. Seafarers are also required to have great communication skills, especially t a good command of the English language. As ships develop and move closer towards full automation, the division between deck, engineering and catering will dissolve as the work environment becomes more multi-functional and intertwined. These changes will require seafarers who are lifelong learners mentally alert, intelligent, and capable of dealing with complex issues, able to handle pressure and critical thinkers. Given that increased automation leaves ships open to cybercrime and hacking, security systems are being upgraded, risks identified, and loopholes being eliminated. (Muslu, 2020) The human resources function for seafarers is currently outsourced. It is likely that, as ships become more automated and security-related risks increase, this function may be handled in-house. These changes are likely to impact on the following areas:

1) The training and certification requirements of seafarers.

2) Human resource and procurement functions. Given that the investment made by ship owners will require greater protection, it is unlikely that crew will be chosen haphazardly. Human resources departments will face the task of attracting talented individuals who are mentally, physically and academically fit to meet the challenges of manning these vessels.

3) Contract terms and career planning for seafarers.

Within the South African context, the Maritime Skills Sector Technical Task Team (MSSTTT) Report of 2014 discussed the most common challenge facing South African cadets. Because South Africa does not have a merchant fleet, it is difficult for cadets to be placed on sea-going vessels as part of their practical training. To ensure that cadets receive practical training, both SAMSA and Transnet purchased berths for their trainee seafarers, as the international merchant fleet has no obligation to assist. SAMSA also acquired the SA Aguilas to assist with cadet placement, but because the ship does not have a cargo hold, it is not suitable (HRDC, 2014). The latest report from SAMSA is that the SA Aguilas

is in the process of being sold. This will have even greater implications for the placement of South African seafarers (Interview with SAMSA).

In addition to the lack of training berths, the cost of training cadets and offices is very high. The cheapest training is for the lowest ranks while officer training is more expensive. For many companies, training was done in-house. However, according to the 2022 survey, this has changed, and seafarers need to carry the cost of their training themselves. In the period before the 2014 MSSTTT report, the survey of ratings and officers revealed that while ratings and lower official levels included black seafarers, the higher official ranks were mostly white seafarers. The report contained some incorrect assumptions about the decreased popularity of seafarers from the Philippines. The impact of automation on ratings, the responsibility of seafarers to pay their own way and the changing requirements for seafarers will all have an impact of the South African seafarer market, which is mainly being trained for the international market. The speed at which these changes are implemented will determine the time—period available for the different countries to prepare. What is clear is that seafaring is in transition, with the seafarer value chain and governments being affected.

## 8. Global Dynamics Impacting on Seafarer Procurement Patterns

The demand and supply of seafarers is linked to the fortunes of the global shipping industry and the contraction or expansion of global trade. The changes wrought by Covid-19, and the Ukraine war have influenced the direction previously predicted of the global economy and the placement of the global fleet therein. This can be deduced from the different focuses of the UNCTAD 2019 and 2022 Review of Maritime Transport Reports. Even before the 2019 Covid-19 Pandemic began, the global economy had started to contract. After reaching 3.1 per cent in 2017, growth in world gross domestic product (GDP) remained steady but edged down to 3.0 percent in 2018. This was below the historical average recorded between 1994 and 2008. The slowdown was expected to continue in 2019. (UNCTAD, 2019) The report noted the changing direction of the maritime sector, and factors which were impacting on the sector, which it identified as the new normal in global shipping. These factors were reflected in the moderated growth of the global economy and international trade. It is characterized by the following trends (UNCTAD, 2019):

1) a supply chain restructuring in favour of more regionalized trade flows;
2) a continued rebalancing in the economy of China;
3) a larger role played by technology and services in value chains and logistics;
4) intensified and more frequent natural disasters and climate-related disruptions;
5) an accelerated environmental sustainability agenda with an increased awareness of the impact of global warming;
6) The new global landscape is also being defined by the following supply-side

trends:

a) Carriers are increasingly eying growth prospects associated with a wider range of services, including landside operations;

b) Ports and shipping interests are focusing attention on inland logistics with additional revenue-generation potential.

Carriers were also seeking to become freight integrators and some major global container lines were in the process of acquiring regional carriers. These changes were deemed to be indicators of the industry's efforts to adapt to changing conditions (UNCTAD, 2019).

The report noted the impact of technology and adaptive changes of environmental legislation on seafarers and the shipping industry. Regarding the IMO regulations on cleaner fuels, it was noted that the entry into force of several global environmental instruments and voluntary standards has impacted on shipbuilding and shipyards responsible for incorporating new standards into the design and construction of ships. Pressure on the industry to develop cleaner and energy efficient vessels has increased. Certification schemes have been introduced, and considerable investment has gone into the development of better hydrodynamics, more energy-efficient engines and low-carbon fuels for ships (UNCTAD, 2019).

On the issue of technology integration, the report noted the changes in the sector which were impacting on the changing skills requirements of the maritime sector. Of these, it was noted that digitalization and automation are transforming the shipping sector and requiring new skills. The latest technologies provide new opportunities to achieve greater sustainability in shipping and ports, together with enhanced performance and efficiency. Digitalization and joint collaborative platforms and solutions, including blockchain, are increasingly being used by the shipping industry, transforming business and partnership models. By adopting these technologies, the shipping industry seeks to promote efficient and secure trade. Benefits include greater supply-chain visibility and use of electronic documents. These changes will ultimately benefit customers who rely on shipping industry services. In addition to these adaptations, autonomous ships, also known as maritime autonomous surface ships, may soon become a reality. These promise to enhance safety and cost savings by removing the human element from certain operations. (UNCTAD, 2019) Many accidents on board shipping vessels are related to human error. Technology and decreased reliance on human efforts promises to reduce these errors and increase safety aboard ships. Other ship accident factors that can be improved are procedures for communication, better selection of personnel and improved design of maritime equipment and technology, including means for communication. In addition to the obligations arising from technology and integration, these have also brought stringent obligations to seafarers in terms of sustainable maritime transport (Muslu, 2020).

Before autonomous ships can be used in commercial operations, the technology needs to be proven, and appropriate institutional and regulatory safeguards

and frameworks developed. Currently, applicable maritime laws and regulations operate on the assumption of that all ships will be manned. In autonomous shipping, the traditional roles of the master and crew on board, as well as the role of artificial intelligence and of remote-control crew working ashore, will need to be assessed and redefined. Important international regulatory developments include an ongoing scoping exercise, initiated at IMO in 2017, for the review of relevant legal instruments. The purpose of the review is to ensure the safe design, construction and operation of autonomous ships, and to make certain that the legal framework provides autonomous ships with the same levels of protection as conventional ships.

With the adoption of digitalization and automation in the shipping industry, the requirements and skills needed for individual jobs are changing. These include the following (UNCTAD, 2022):

1) an increase in shore-based jobs and reductions in the number of crew on board vessels;

2) new and different skills and knowledge, especially in relation to information technology, if seafarers are to assume the redefined roles on board and ashore that will be needed to ensure safe vessels and efficient operations;

3) women may enjoy increased opportunities to pursue a maritime career, given that less physically strenuous tasks, combined with the need for more information technology skills and knowledge, are being required in the maritime sector. Shore-based jobs also provide a less hostile working environment for women than sea-based positions.

The focus of the 2022 UNCTAD Maritime Transport Review reflected some of the impacts of shifts mentioned in the 2019 Review. The impacts of the Covid-19 Pandemic on the shipping industry were highlighted, with recommendations being given on urgent interventions that may be required. UNCTAD projected that maritime trade growth would moderate to 1.4 per cent for 2022 and for the period 2023-2027 expand at an annual average of 2.1 per cent. This is a slower rate than the previous three-decade average of 3.3 per cent. For many years the fastest growing segment was containerized trade. For the 2022 period, it was projected to grow by 1.2 per cent, before marginally picking up to 1.9 per cent in 2023. The projected deceleration was not just a consequence of pandemic-induced lockdowns, but also of strong macroeconomic policy impacts combined with a weakening in China's economy. In addition, faced with rising inflation and living costs, consumers are spending less, while to some extent switching expenditure from goods to services (UNCTAD, 2022).

One of the impacts of the pandemic was the decreased shipping connectivity within most leading nations. This was linked to the onset of the logistics disruptions in late 2020. The decline in liner shipping connectivity was global, though with variations between countries. Despite these declines, the world's most connected country remained China, which widened its lead. India also extended its regional connections by upgrading port capacity. Similarly, in North Africa con-

tinued development of port infrastructure helped mitigate the impact of the pandemic. Another development which has been noted is the ageing global fleet. Since 2011, the global fleet has been ageing. By number of ships, the current average age is 21.9 years, and by carrying capacity 11.5 years. Bulk carriers remain the youngest vessels with an average age of 11.1 years, followed by container ships at 13.7 years, and oil tankers at 19.7 years. The average ship age has been increasing partly because, in the wet and dry bulk sector especially, shipowners have been uncertain about future technological developments and the most cost-efficient fuels, changing regulations and carbon prices. To benefit from the current high freight and charter rates, they have therefore kept their older ships in operation (UNCTAD, 2022).

Other developments included the high freight rates that were attributed, in part, to port congestion and decreased global trade. At the beginning of 2022, container freight rates remained high and volatile, although they began to drop in the second quarter of the year. Future rates will be driven by several factors, working singly or in combination. This suggests greater volatility and an overall downward trend in some segments. Factors impacting on freight rate prices include increased uncertainty regarding demand, the degree of port congestion, potential new supply chain disruptions, and the effects of the war in Ukraine, including increased fuel costs. Another major impact of the Ukraine war was the disruption of global supply chains, as countries had to seek alternative suppliers. Some of these changes are short term and are expected to normalise after the war, as supply chains stabilise (UNCTAD, 2022).

Other changes have more far-reaching consequences, like the consolidation of shipping lines through mergers and acquisitions. In response to oversupply of capacity, the container shipping sector undertook horizontal consolidation through mergers and acquisitions, within and outside of shipping. Shipping carriers have pursued vertical integration by investing in terminal operations and other logistics services. They are also working together in consortia and alliances. As a result, between 1996 and 2022, the top 20 carriers increased their share of container-carrying capacity from 48 to 91 per cent. In addition, over the past five years the four largest carriers increased their market shares to control more than half of global capacity. Through vertical integration the four largest container shipping lines were able to offer more of their own terminal services. Today the two largest container terminal operators, in terms of throughput, are China Cosco Shipping and APM Terminals, both of which are affiliated to two major Chinese and Danish shipping lines. The most common form of collaboration is strategic alliances. Since 2015, the proportion of global capacity controlled by carrier members of such alliances has risen to more than 80 percent, increasing the bargaining power of the shipping sector (UNCTAD, 2022).

In early 2022, the total fleet of seagoing merchant vessels was 102,899 ships of 100 gross tons and above. In the 12 months to January 2022, in dwt terms the global commercial fleet grew by 2.95 per cent. At the beginning of 2022 the av-

erage age of the global fleet was 21.9 years in terms of number of ships, and 11.5 years in terms of carrying capacity, and in 2022 on both measures the average age continued to increase. The situation regarding new ship sales remains unchanged.

Environmental legislation has also been strengthened, placing more pressure on shipping companies to comply. IMO environmental regulations, which cover issues such as air pollution, ballast water treatment and double hulling of tankers, have continued to influence decisions on the design and construction of ships. On 1st January 2023, three new IMO regulations come into force. These seek to reduce maritime carbon emissions and the environmental impact of shipping. These regulations are:

1) The Energy Efficiency Existing Ship Index (EEXI) – a framework for determining the energy efficiency of vessels over 400 GT. Ship operators will have to assess their ships' energy consumption and $CO_2$ emissions against specific energy efficiency requirements. To ensure compliance, ship owners may need to reduce their vessels' emissions. This is a one-time certification.

2) The annual operational Carbon Intensity Indicator (CII) – The CII, which applies to ships of 5000 GT and above, indicates a vessel's performance and efficiency based on annual fuel consumption, using a rating from A to E. The CII will be assessed annually from 2023 and become increasingly stringent towards 2030. For ships that achieve a D rating for three consecutive years, or an E rating in a single year, shipowners need to develop a corrective action plan.

3) The enhanced Ship Energy Efficiency Management Plan (SEEMP) – The SEEMP is the mechanism for improving CII ratings. It encompasses targets and planning, and the new technologies and practices needed to optimise ship performance, together with procedures for self-evaluation, verification and company audits.

Companies must also comply with new financial regulations such as the EU Sustainable Finance Disclosure Regulations and consider initiatives such as the EU Green Bond principles and the Poseidon principles that address the climate impact of ship finance portfolios. Underperforming companies may struggle to gain access to investors and capital. The impacts of these legislative impacts are far-reaching and will impact on the ageing non-compliant global fleet. This factor differs from one trading area to another. The region with the oldest bulker, container ship and oil tanker fleets is Africa, followed by developing South America for bulk carriers and oil tankers. Developing Asia and Oceania rank joint-third for oil tankers. This will have greater impacts on countries seeking to enter the ship-ownership arena. Compliance with environmental regulation and competitiveness could make African ownership even more difficult, and along some trade routes Africa may also face the higher costs associated with the deployment of greener ships (UNCTAD, 2022).

With regards to seafarers, UNCTAD focused mostly on the impacts of Covid-19 on seafarers globally, noting that while the MLC 2006 was generally

observed, during the Covid-19 pandemic, seafarers rights were often overlooked, with crews being unable to return home, many ports refusing entry for sick crew, lack of vaccinations and medical care as well as increased abandonment of crew. With the war in the Ukraine, seafarers also had to sail through high-risk zones, without the proper protections. It was also noted that the number of female seafarers remains extremely low, making up only 2 percent of the global fleet. Most female seafarers were placed on cruise ships. Because of the lessons learned during the Pandemic and in preparation for future pandemics, it has been suggested that the Maritime Labour Convention (MLC) 2006 be amended to include the following:

1) legal requirements for seafarers to be able to access medical care ashore and facilitate repatriation of the remains of seafarers who have died on board;

2) strengthening health and safety policies on board ships to protect against accidents;

3) clauses that provide for all seafarer deaths to be recorded and reported annually to the ILO and that the relevant data be published;

4) provisions facilitating seafarer communication with their loved ones ashore.

UNCTAD also noted the release of a seafarers' rights and welfare Code of Conduct in October 2021. Based on international labour and human rights standards and principles, the Code of Conduct provides for the full spectrum of seafarers' rights and welfare, including fair terms of employment and crew protection to availability and appropriate management of grievance mechanisms. The Code, which has been drafted by the Sustainable shipping Organisation (SSO) aims to address systemic risks and impacts experienced by seafarers through:

a) emphasising rights in the MLC that are not being adequately enforced;

b) including rights and issues that are important to seafarers but not currently covered in the MLC.

The Code of Conduct deliberately does not cover more technical health and safety issues that are equally important to the rights to life and health of seafarers, as these are covered in the MLC and other more detailed conventions, regulatory requirements, standards, codes and inspections. It assumes that the issues covered by this Code of Conduct will be integrated together with health and safety requirements into the overall management of all aspects of shipping that affect seafarers. (SSO, 2021) Some of the issues raised in the Code include the ongoing training by shipping companies of officers and ratings and the enforcement of fair procurement practices. In its provisions on fair employment practices, the Code places an obligation on the ship operator or shipping company to ensure that they:

"2.1 Prohibit forced labour, including through practices that can lead to forced labour situations, such as through debt bondage due to the payment of recruitment fees and related recruitment costs, by verifying that seafarers

have not paid fees or other charges for recruitment or placement to a seafarer recruitment and placement service and includes this requirement in the shipowner/ship operator's contracts with seafarer recruitment and placement service.

2.2. Verify that seafarers have not been subject to fraud, substitution of contracts, or retention of passports.

2.3. Verify that seafarers are not charged other costs that are prohibited by the MLC such as repatriation costs.

With regards the provision of fair terms of employment

The shipowner/ship operator:

2.4. Ensures that seafarers are paid in full, correctly (including for all time worked, for overtime and at the previously agreed upon rates), on time and at the official published rate or prevailing market rate not unfavourable to seafarers in accordance with seafarer instructions.

2.5. Pays seafarers from the time and destination of departure to join the ship to the time of return to the destination selected for repatriation.

2.6. Provides continuity of insurance coverage (additional health care, disability and retirement packages) during the period(s) onshore until return to the ship covering seafarers (officers and ratings) and their families for those seafarers who have agreed to return to the ship(s).

2.7. Under contract agreements, all seafarers are free to join a workers' union of their choice".

The issue of training has been raised by the International Transport Federation, with regards to the technology upskilling required by crew. In its 2021 Sustainable shipping position paper, it noted that the industry is moving from a system based on one dominant engine and fuel type to one where multiple engine and fuel types are being utilized. This will need a more multiskilled workforce together with a training regime that is fit for purpose.

Seafarers will need support through the transition. Retraining costs need to be fully funded by either employers or governments, or a mixture of both. ITF has called for guarantees that seafarers will not have to use their shore leave to retrain. Governments will need to play a major role in revamping the new system of seafarer training. The new system should be based on the principle of tripartism, with active engagement from unions and employers with government oversight. They provided that it is crucial that a new, fully standardised system is operated on a not-for-profit basis so that seafarers and new trainees are not exploited by poor quality training institutions with inadequate expertise. Trade union training schools, government-run institutes and properly accredited not-for-profit institutes must form the basis of the new system. An international body will need to oversee the system and ensure it is globally standardised. Although the revision to the STCW is due to come into force in 2035, as 2030 is the first important deadline for bringing down shipping emissions, change needs to happen much more quickly (ITF, 2021).

The industry is in transition, with many uncertain variables affecting commitment from the shipping industry, especially with regards investment in new builds. Given that renewable fuel development is still in its infancy, and it is uncertain which fuels will be found to be most efficient, durable and available for bunkering purposes, it is understandable that the shipping industry has adopted a wait and see attitude. It is most likely that as shipowners have more clarity about these renewable fuels and their availability, there will be movement towards the building of vessels that are equipped to deal with the new global environmental norms as well as the increasing demands of the global supply chains, with an increase in the number of very technologically advanced semi-autonomous ships. This period of adjustment provides an ideal opportunity for governments to work with industry in adopting mechanisms and methodologies that incorporate the new normal into seafarer education. Given that there will be increased shore-based job focus, it is still unclear how these job positions will be populated and where training will be done. These are all matters which will need to be discussed at government level, in collaboration with the relevant shipping bodies and ship-owner associations. Without the adoption of a proactive approach to change, it is likely that governments may be unprepared for the industry job transition.

## 9. Gaps in the Regulation and Training of South African Seafarers

Within the South African context, there has been little comprehension about the status of South African seafarers, as the industry has been fragmented into private training and government funding training through institutions like the Cape Peninsular University of Technology (CPUT), the Durban University of Technology (DUT) and the Nelson Mandela University Campus. For purposes of this paper, information was sourced through interviews with relevant government officials, training institutions and procurement agencies as well as international reports on the status of South Africa as a seafarer procurement destination. In an interview with the SAMSA official in charge of the seafarer portfolio, it was understood that from a regulatory position, the South African Maritime Shipping Authority (SAMSA) which is responsible for the accreditation of all seafarer training authorities, verification of results and enforcement of training, ensuring that all accredited training authorities comply with the latest International Maritime Organization training requirements. SAMSA also works with the South African Maritime Training Academy (SAMTRA) on the placement of cadets, seeking to secure berths for cadets for their one-year practical training experience, Cadets who seek placement through the National Cadetship program do not have to pay for this training as the government pays for their placement costs. As South Africa does not have its own national merchant fleet, it must source training berths from foreign vessels operating within South African waters. Because of the lack of training berths globally, it must compete with

the global community.

In addition to the problem of cadet placement, the following areas of concern were highlighted.

1) While SAMSA deals with accreditation of seafarers, training academies and procurement agencies, seafarers were not bound to work through these avenues and could choose to find placement themselves, through shipping line offices or global recruitment agencies. Unfortunately, outside of the protected accredited channels, these seafarers were open to procurement abuses by unscrupulous agencies or agents. The ITF Seafarers Bulletin of 2020 highlighted the abuses experienced by these seafarers and noted that with regards to non-compliant contracts, forced payments for repatriation after contracts ends, and exploitative placement fees, African seafarers were often targeted, Other abuses which they experienced were related to the late payment of wages, withholding of overtime and payment on non-industry standard scales. Other non-protected crews faced the risk of abandonment, where ship-owners went bankrupt. Although South Africa has unions, seafarers are under protected as they seldom join unions. Within the South African context, because our seafarers are dependent on foreign vessels, without international union representation, they are without remedy, unless they report these atrocities to SAMSA. Within the South African Context, there are no debriefing mechanisms for seafarers or means by which SAMSA can follow-up with seafarers, unless they reach out to SAMSA first.

2) The issue of funding training institutions. While government institutions are funded, private training institutions have to self-fund or find other ways to assist themselves; this has meant that seafarers who train through private academies are likely to pay more than those going through government institutions. Funds for simulators to assist with training were therefore difficult to obtain. This added to the problem of seafarer placement. Would-be seafarers must fund their own training, which is not subsidized. This means that, like any other learner, they need to find learner assistance themselves, either through university loans or NSFAS.

3) While South African seafarers are now on the Whitelist, are well regarded and speak English, our seafarers were not as cheap as those of the low-income developing countries, where a seafaring wage was seen as a good wage. South African seafarers were paid on developed country scales, making them overpriced, in comparison to the much cheaper Asian labour.

4) An issue which was becoming more relevant was that of automation, which was bringing a shift to the market. While our training is STCW compliant, seafarers would still be required to improve themselves if they are to be relevant on the new technologically advanced ships.

5) Another issue that worked against the placement of young cadets is the fact that the shipping industry preferred more seasoned seafarers to young seafarers. This has created a gap in the global market, with young seafarers struggling globally to find placements.

6) Because contracts were short term, with the longest contract period being 10 months, seafarers were at a disadvantage with regards job security. There was often no guarantee that they would be placed on the same vessel when they returned, unless they were good workers and proved themselves on board.

South African Seafarer demographics,

At present, there are 1684 licensed deck officers in the country and 1867 licensed engine officers. Roughly 60% of the seafarers in the country are above the age of 40. The percentage is slightly lower for officers however, with 47% being under the age of 40. Around 15% of the licensed officers under the age of 40 are female. Because of the recent recruitment drive, the percentage of female cadets increased to 30%. Of the 3551 licensed officers in South Africa, 1684 hold senior officer licenses. (IMEC, 2022) With regards to career opportunities, it was found that most South African Seafarers sail on v cargo, tankers and offshore vessels in Angola and Mozambique. With regards placement on international vessels, it was found that the bulk of South African seafarers now work mainly with principals from Europe and India Due to the lack of placement opportunities, others have found work opportunities in the South African Superyacht market. In addition to officers, South Africa currently has 1613 licensed ratings. Of these, 59% are above the age of 40.

Training for officers occurred at DUT, CPUT and Nelson Mandela University, who have the capacity to train a maximum of 60 officers per course each year. The training courses offered are as follows:

1) Cape Peninsula University of Technology (CPUT): deck and engine;

2) Durban University of Technology (DUT): Engine and advanced engineering diploma (mechanical to marine bridging Programme), working on a deck qualification;

3) Nelson Mandela University (NMU): engine.

Private institutions, with a capacity of 20 cadets per Programme include:

1) South African Maritime Training Academy: deck, engine and engineering bridging Programme;

2) Sea Safety Training Group (SSTG): deck and engine;

3) uMfolozi TVET College: engine.

Because of the inability to source berths, these training academies are working under capacity. Over the past 5 years, the number of deck graduates per year has ranged from 60 to 80 and the number of engine graduates has ranged from 50 to 70. There was initially a decline in the number of cadets and graduates when Safmarine was acquired by the Maersk group. Because of the Operation Phakisa skill development initiatives, including funding for cadet training, these figures have increased. The South African International Maritime Institute (SAIMI) National Cadet Programme graduates have averaged 43 over the past 6 years, with a total of 256. These are split between 141 deck graduates and 115 engine graduates (IMEC, 2022). While the training for ratings was investigated, the Council did not find welding courses that were up to spec.

While South Africa was identified as a possible Officer sourcing destination, a limiting factor was the weakness in mathematics and science at a school level. Given that the officer training falls within the sciences, would-be officers are expected to be proficient in these subjects. Going forward, in a digital shipping framework, officers and other support staff would be required to be more highly specialized. This could also be a factor that has decreased the interest of would-be seafarers (IMEC, 2022).

## 10. Results of the Seafarer Survey

The seafarer survey took place over 3 months, from December to the end of February. Of the respondents, 63 were seafarers and 2 were seafarer procurement agencies. Of the seafarer participants, 24 were female and 41 were male. Participants were mostly Zulu speaking (36), with 6 Xhosa speakers, with 14 English speakers, I Afrikaans speaker, 1 Sepedi, 1 Xitsonga, 1 Swahili, 1 Tshivenda speaker, 1 Hindi, 1 Afrikaans and 1 Setswana speaker (Figure 1).

On the question of where they are currently based, many participants referred to the area from which they work while others referred to their workstation (Figure 2).

Table 1 below refers to the positions held by the participants.

Table 2 provides the participants responses regarding the number of years they spent at sea.

Table 3 provides the participants responses regarding whether they had received their experience domestically or internationally.

Figure 3 provides the participants responses regarding the types of vessels they had served on during their service offshore.

Figure 4 contains the positions which the participants had occupied during their careers on board various vessels.

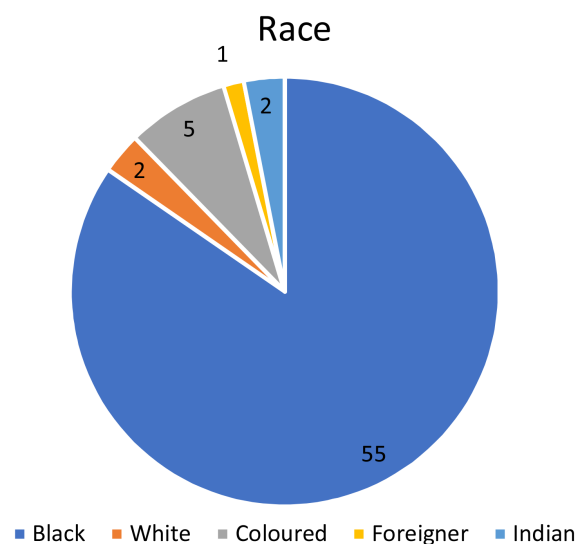Participants were asked to provide their highest education levels. These results



**Figure 1.** Participants racial make-up.
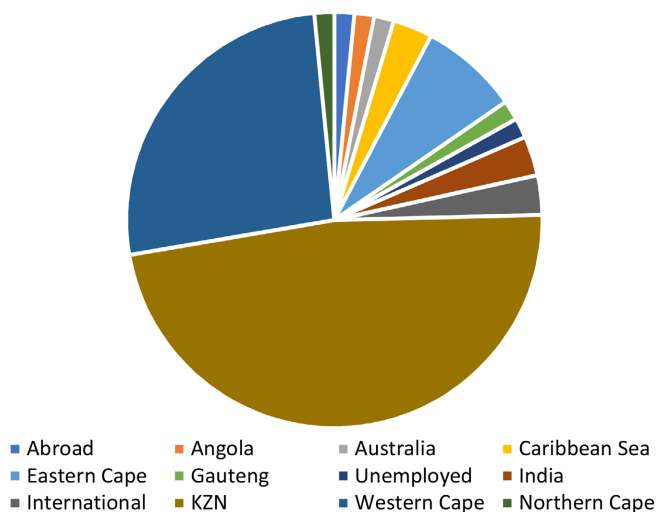
## Participant placement



Figure 2. Area from which participants are deployed. (Source: Author)

Table 1. Positions held by participants. (Source: Author)

| No | Category | Total |
|---|---|---|
| 1 | 2$^{nd}$ Engineer | 1 |
| 2 | Cadet/Trainee | 30 |
| 3 | Master | 1 |
| 4 | Officer | 21 |
| 5 | Qualified Seafarer | 5 |
| 6 | Rating | 4 |
| 7 | Retired Seafarer | 1 |
| | Overall response | 63 |

Table 2. Time participants had spent at sea. (Source: Author)

| No | Category | Total |
|---|---|---|
| 1 | 0 days | 11 |
| 2 | 1 to 13 months | 14 |
| 3 | 1 to 3 years | 21 |
| 4 | 3 to 5 years | 1 |
| 5 | More than 5 years | 16 |
| | Overall Response | 63 |

are portrayed in Figure 5 below.

The time since the participants had completed their training was deemed important, as it enabled researchers to determine the level of experience of the participants. These results are portrayed in Table 4 below.

Table 3. Places where participants had obtained their work experience. (Source: Author)

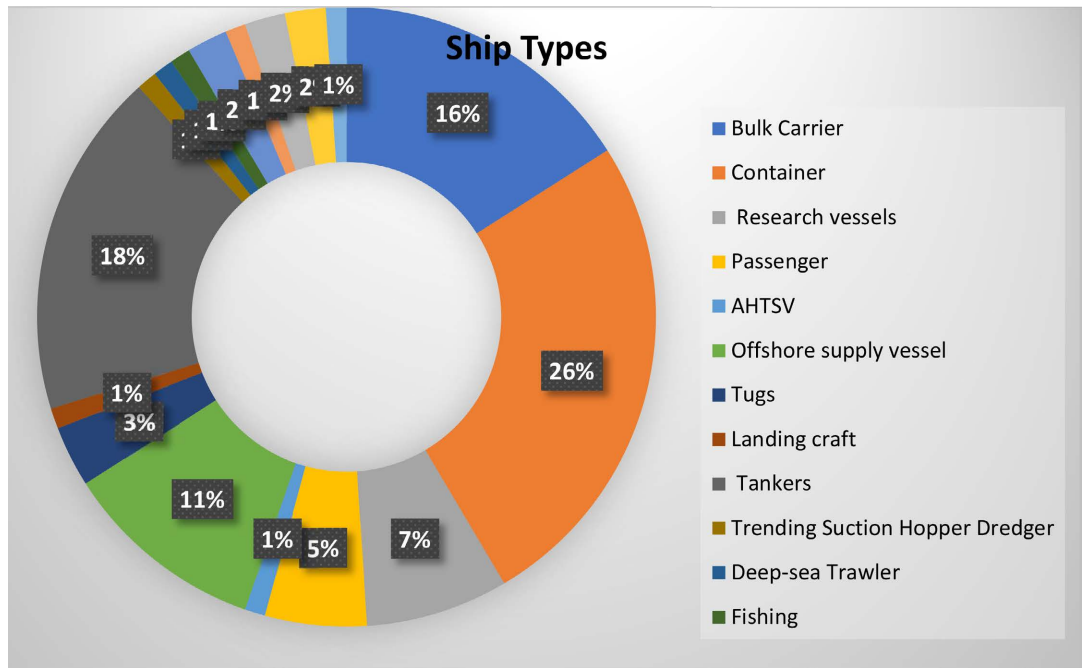| No | Category | Total |
|----|----------|-------|
| 1 | Domestically | 7 |
| 2 | Internationally | 33 |
| 3 | Both domestically and internationally | 23 |
| | Overall response | 63 |



Figure 3. Types of ships on which participants had worked. (Source: Author)
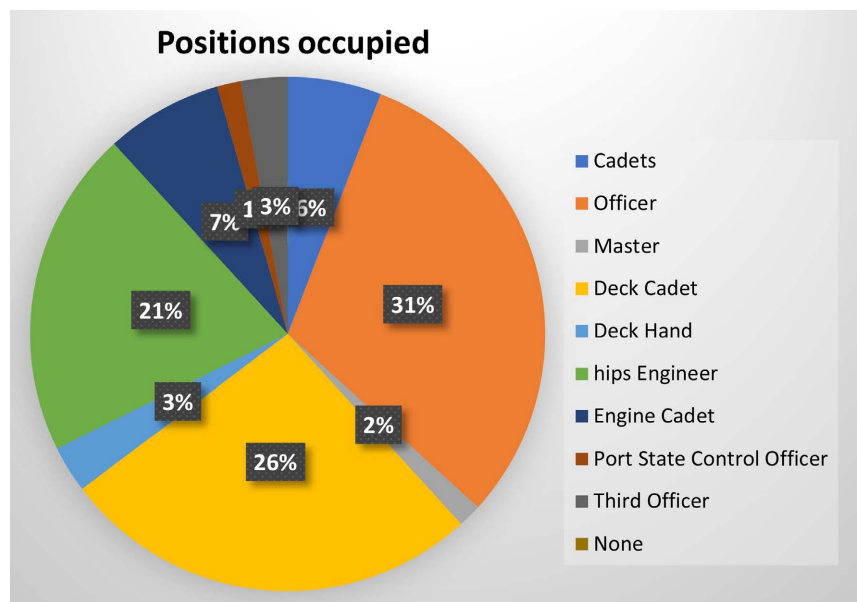


Figure 4. Positions which participants had held during their careers onboard. (Source: Author)
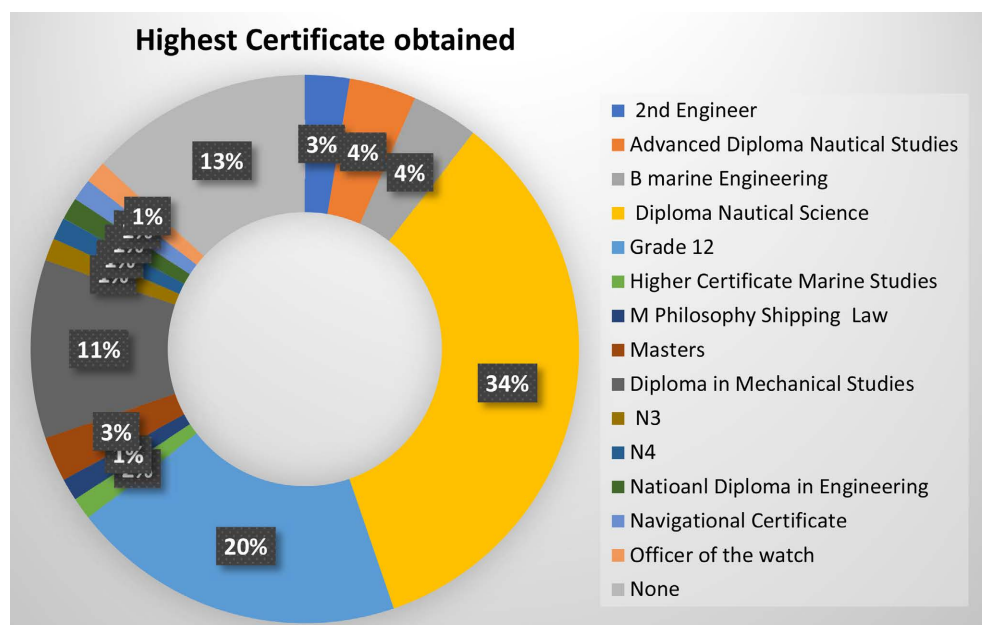
Figure 5. Highest level of training obtained by participants. (Source: Author)

Table 4. Number of years since participants had completed their training. (Source: Author)

| No | Category | Total |
| --- | --- | --- |
| 1 | 1 to 3 years | 37 |
| 2 | 4 to 5 years | 10 |
| 3 | 6 to 10 years | 11 |
| 4 | More than 10 years | 5 |
| | Overall response | 63 |

The training institutions which participants had trained at are portrayed in Figure 6 below. Seafarers had trained at the following training institutions.

The ability of cadets to find training berths has been a real issue for South African training institutions. Table 5 below provides the time which it took for students to obtain practical training.

The timeframe which participants took to complete their cadetship training is provided in Table 6 below.

Reasons why participants were unable to find placement are provided in Table 7 below.

While participants were trained through maritime training institutions, the question of whether the certificates which they provided graduates were recognized internationally is critical. Their responses to the question of whether their training has been recognized by the international community is provided in Table 8.

Participants were expected to have many additional certificates before they could work aboard international vessels. Many of these certificates were dependent on the vessel type. Their responses are provided below in Table 9.
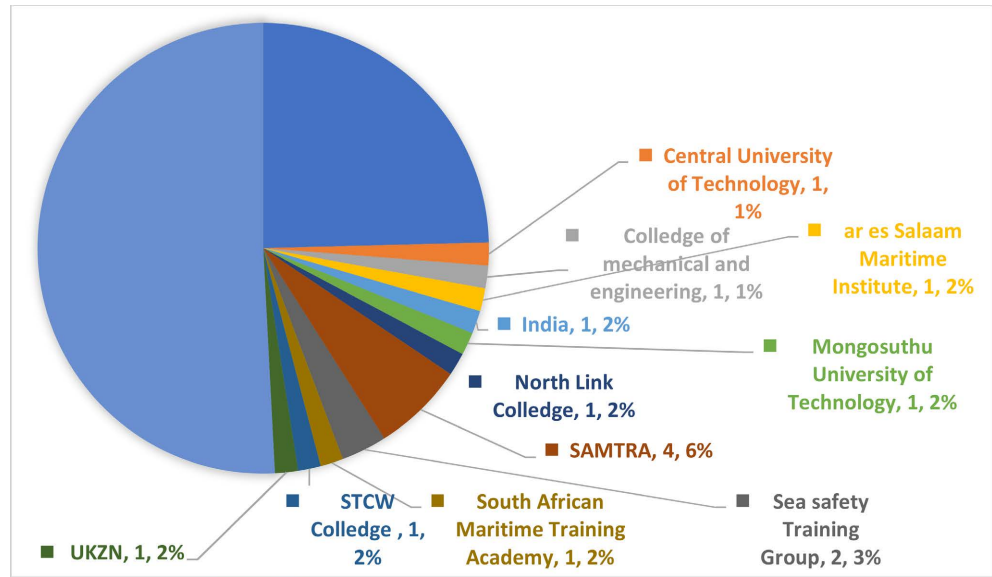
**Figure 6.** Institutions at which participants had trained. (Source: Author)

**Table 5.** Length of time before learners obtained training berths. (Source: Author)

| No | Category | Total |
|---|---|---|
| 1 | 0 to 3 years | 55 |
| 2 | 4 to 5 years | 5 |
| 3 | More than 5 years | 3 |
| | Total Response | 63 |

**Table 6.** Timeframe which participants took to complete their training. (Source: Author)

| No | Category | Total |
|---|---|---|
| 1 | 1 year | 13 |
| 2 | 2 years | 26 |
| 3 | More than 3 years | 24 |
| | Total Response | 63 |

**Table 7.** Reasons why participants were unable to find placement. (Source: Author)

| No | Reason provided | Total |
|---|---|---|
| 1 | Was working shoreside, returned to sea later | 1 |
| 2 | Backlog with the company agency working with | 1 |
| 3 | Not applicable | 20 |
| 4 | Covid-19 Restrictions and ship availability | 1 |
| 5 | No berths/vessel scarcity | 16 |
| 6 | Insufficient experience | 1 |
| 7 | Electrical training | 5 |

Continued

| 8 | Don't have CDC yet | 1 |
| 9 | Race/Origin | 2 |
| | Total response | 48 |

Table 8. Recognition of certificates. (Source: Author)

| No | Are your certificates recognized | Total |
|----|----------------------------------|-------|
| 1 | Yes | 60 |
| 2 | No | 3 |
| | Total | 63 |

Table 9. Types of extra certification required for work aboard foreign vessels. (Source: Author)

| No | Types of training /Courses required | Total |
|----|-------------------------------------|-------|
| 1 | Wide variety and ancillary courses | 3 |
| 2 | Basic Tanker courses | 4 |
| 3 | Certificate of competency | 3 |
| 4 | Dangerous Goods Certificate | 7 |
| 5 | DSD, PST, PSSC, MFA, Firefighting, AB Deck, First Aid, General maritime safety and distress (GMDSS) | 4 |
| 6 | LNG and Chemical Tanker Endorsement | 1 |
| 7 | None | 3 |
| 8 | Personal Survival Techniques (PST) | 3 |
| 9 | Safety Certificates | 30 |
| 10 | STCW | 6 |

Despite completing the basic international STCW training, participants felt that they needed additional skills to be competitive. Their responses are provided in Figure 7.

When asked if they had any shore-based skills,

1) 33 said No;

2) 30 said yes. Skills included Admin, (2), Computer literacy, writing and communication skills, driver, compliance, occupational health and safety, customer service,, fishing, guest services, welding and swimming, teaching (2), Nautical Superintendent (2), Diesel mechanic apprentice, ISO Auditing, project manager, Training Facilitator, Law, Maintenance and Technical Manager, Marine Safety Advisor, Vessel Co-Ordinator, Maritime school lecturer, Crewing manager, Ship surveyor, Port State control officer, marketing and sales, shipping and logistics, supply chain, risk assessment training, netting, mechanical (5) and

mechanical engineering.

With regards educational challenges encountered, participants responses are provided in Table 10.

On the question of whether they felt that they were suitably skilled for the changing shipping environment, participants provided many different responses which were related to internal and external forces. These responses are provided in Table 11.

On the question of what changes, they need to make themselves more marketable.

1) Twenty-three participants stated that they needed more education. Avenues for education included the following:

a) obtaining higher certification;
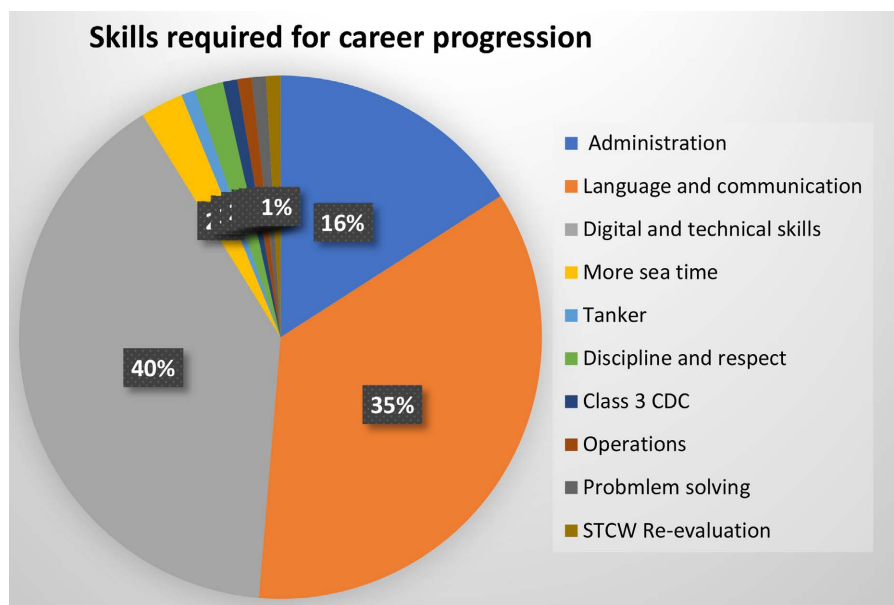
b) getting better understanding of the shipping industry;



**Figure 7.** Skills required for their career progression. (Source: Author)

Table 10. Educational challenges faced by participants. (Source: Author)

| No | Educational challenges encountered. | Total |
|---|---|---|
| 1 | Lack of money for basic/intermediate/advanced training | 15 |
| 2 | No access to officer training | 8 |
| 3 | None | 5 |
| 4 | Lack of flexibility from CPUT due to the removal of the National Diploma Program in 2024 | 1 |
| 5 | Lack of structured training | 1 |
| 6 | No stipend when not training | 1 |
| 7 | STCW revalidation with SAMSA higher than the international equivalent | 1 |
| | Total response | 32 |

Table 11. Number of participants who thought they were suitably skilled. (Source: Author)

| No | Response | Total |
|----|----------|-------|
| 1 | No | 2 |
| 2 | Not sure | 9 |
| 3 | Yes | 52 |
| | Total response | 63 |

c) getting tanker certification;

d) going to more maritime webinars;

e) doing more short courses;

f) further legal training;

g) diversify knowledge;

h) obtain proper training.

2) Seven of the participants stated that they needed to mature through experience. In keeping with this response, another started that they should work hard when they were given an opportunity so that they could leave a mark in this way people would miss them when they were absent It was also necessary to maximize opportunities provided. In obtaining experience, it would be necessary to minimize time spent at home.

3) Another commented on the changes in the shipping industry to mostly digital and more sophisticated equipment, systems and machinery being used which required ship specific knowledge. The basic STCW qualification was therefore insufficient as it limits choices. To be marketable ship specific courses are required.

4) Three other participants felt that the marketability of seafarers was related to external, rather than internal factors. For positive change, there was a need to remove nationality bias. Another stated that they had done all they could. The onus is now on government and other stakeholders to engage with foreign shipowners to provide opportunities for South Africans. Another felt that there was nothing that could be done, as seafaring is a dying job.

With regards to whether they belonged to any manning agency,

1) 30 said no;

2) 36 said yes. The manning agencies to which the participants belonged are provided in Table 12.

Of the participants surveyed, not all were employed. Some were still training, while others had retired. Table 13 below provides their responses.

Literature showed that seafarers faced many challenges. The survey provided an opportunity to obtain direct feedback from seafarers about the types of challenges they faced on board. Figure 8 provides their responses.

As cadets often faced many challenges along their path, a question was asked about whether, with time, it had become easier to find employment at sea. These responses are recorded below, in Table 14.

**Table 12.** Manning agencies to which participants belonged. (Source: Author)

| No | Name of Agency | Total number of participants | National/International base |
|---|---|---|---|
| 1 | 4 × 4 | 1 | National |
| 2 | AMSOL | 1 | National |
| 3 | Jj | 1 | National |
| 4 | Klaveness Ship management | 2 | International |
| 5 | Marine Crew Services | 5 | National |
| 6 | Bourbon Management | 1 | National |
| 7 | Protea Maritime International | 1 | International |
| 8 | SAMTRA | 25 | National |

**Table 13.** State of employment of participants. (Source: Author)

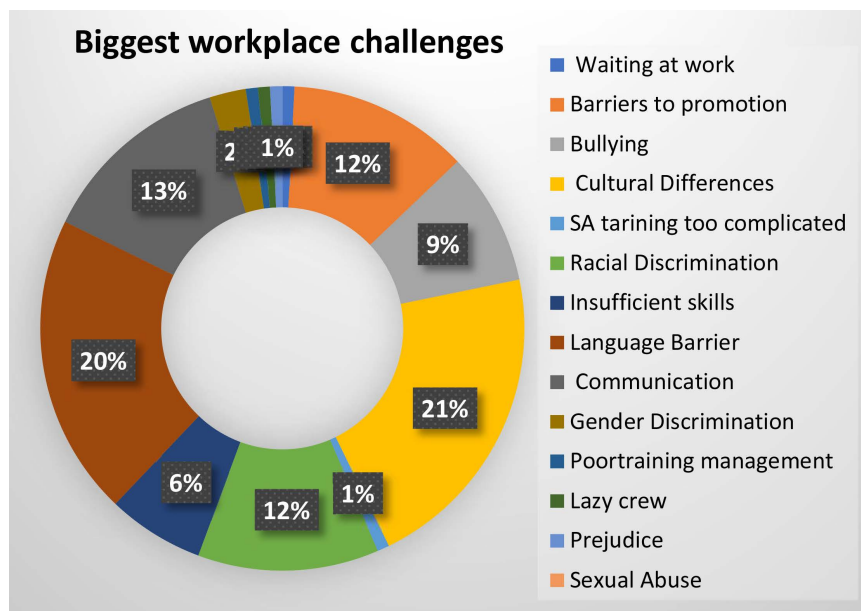| No | Number employed as seafarers | Number unemployed | Number employed but not as seafarers | Non-seafaring work being done by participants. |
|---|---|---|---|---|
| 1 | 26 | 30 | 7 | Worked at Nando. S |
| 2 | | | | Port State control Officer in Australia |
| 3 | | | | Engineer Planner at call center |
| 4 | | | | Worked at MET |
| 5 | | | | Cleaner |
| 6 | | | | Health and Safety Advisor |
| 7 | | | | Senior Manager at Transnet |



**Figure 8.** Workplace challenges experienced by participants. (Source: Author)

Seafaring is a difficult career, mentally and physically. It would therefore be understandable if seafarers had misgivings. Their responses to this question are recorded in Table 15 below.

The inputs of participants were deemed very important, as it is difficult to obtain direct seafarer feedback. To ensure that the feedback obtained the correct attention, these responses were detailed below, in Table 16.

Table 14. Number of participants who felt that life at sea had become easier. (Source: Author)

| No | Like at sea is becoming easier | Life at sea is not becoming easier |
|----|-------------------------------|------------------------------------|
| 1 | 49 | 14 |

Table 15. Number of participants who regretted choosing a seafarer career, with reasons. (Source: Author)

| No | Did not Regret | Maybe | Did Regret | Reason |
|----|---------------|-------|-----------|--------|
| 1 | 43 | 15 | 5 | Difficult to get job |
| 2 | | | | Seafaring is for youth only |
| 3 | | | | Racial Discrimination |
| 4 | | | | Nothing is changing |

Table 16. Participant inputs regarding the current South African seafarer situation. (Source: Author)

1) Department of Transport needs to employ ex captain or Seafarers, people who know what's going on at sea.

2) Getting companies to take South African cadets

3) Honestly at this point I'm very discouraged by the South African government. So, I'll keep fighting for myself and forcing my way into spaces of opportunity because nobody is going to lookout for me other than myself

4) More Ships on the SA register that will employ SA seafarers and a South African fleet

5) South African Government must push hard with the initiative of buying its own vessels; this will close a big gap in the seafaring Career.

6) Not only in South Africa but Africa in general should unite and try to create better seafarers

7) Collaborate with shipping companies and ship owners. Recognition of SA CoC in the form of governmental agreements

8) To have better practical training at university level. An increase in manning companies so that not everyone is dependent on SAMTRA or MSC.

9) Focus on the human element.
   Seafarers are subjected to a lot of verbal abuse and sometimes physical and sexual from senior offices which is damaging to the individual seafarer's wellbeing.
   Exposure to more shipping companies who can provide employment to SA seafarers.
   Hold honest discussions on what the seafaring career is like with those aspiring to join the industry, so they are fully prepared.
   Find solutions to pressing issues of unemployment of SA seafarers.
   A lot of companies are pulling away from employing SA seafarers. One of the reasons they've put forward is that SA seafarers are lazy, which is not necessarily the case—SA know their right and exercise them accordingly which sometimes disrupts operations and causes delays, upsetting shipowners and clients. This I found is the main reason SA seafarers are losing opportunities at sea but aren't aware. It would be great to hold discussions with seafarers in this regard so behaviour could be changed. And hopefully the shipowners and their agents can open doors to SA seafarers.

## Continued

10) Firstly, they must reduce tertiary intake to 15 because there's no employment

11) More cadetships AND employment after cadet ships.

12) Scrap employment by race.

13) Provide more training

14) Don't concentrate on entry level requirements (cadetship) but also progression for the more experienced personnel.
Avail recognised softer skills training doable by seafarers in their contract.
If not able to get SA registered ships, have MOU with other neighbouring countries for the preferential placement of SA seafarers.
Regulate the cost of ancillary training for seafarers & make it viable for customers-this one is tricky because the business side will suffer but we do need to make the industry accessible to an average San.
Add Fishing Operations as a module to an average Nautical Studies syllabus so students who've completed their studies can crossover to fishing without needing to attend a different school for a single module.
Liaise with Class Societies to see any gaps in our training that could be relevant to them & perhaps employ the students with no/limited sea experience.
Get Naval Architecture qualification in SA to expand available work options for seafarers.

15) Proper practical training as most seaman cannot work on every vessel

16) South African maritime stakeholders must come together to serve a common goal in the country's best ability not political basis. Many seafarers are from KZN, and we don't have a well-known manning agency based in KZN that will yearly recruit DUT graduate.

17) More access to training for cadets. More berths. More involvement in the wellbeing of seafarers at sea

18) Need to provide or make way for cadetship opportunity, or alternative ways to find jobs at sea. Maybe SASCO will solve these problems.

19) Make it easier for us to travel without visas...Europeans have access to more jobs as their passports are worth more...we must jump through hoops to get visas, etc...

20) For us as a country to not stop at getting cadetship but also make sure there is employment after cadetship is done. Start investing in the training of seafarers by going to see what the rest the world is doing that we are not.

21) Create more exposure to the career

22) More connections with shipping companies

23) Provide more employment opportunities, reduce contract length and offer shore side benefits to seafarers

24) We must try to teach young professionals that the culture difference exists on board international going ships to avoid misunderstanding other nationals. Many young cadets quit their careers because of the treatment which is mainly focused by the culture difference.

25) Have connections with other international companies so that they can be open to hiring South African seafarers, we have a lot of qualified officers sitting at home

26) Promote seafarer career options at the lowest level, such as High Schools.
Dissolve Transnet.
Allocate even more funding to SAMTRA so that they can increase the cadet output each year
Change the examination process for CoC's at SAMSA to systems seen in Germany, Poland and the Netherlands.

27) Increase number of South African vessels for international voyages and provide sea time to seafarers who require one

28) The supply is more than the demand, universities are supplying more cadets (taking more students for money benefits while there is less demand) I feel like they need to be monitored on the intake and people who are employed as industry development needs to commit themself and engage with shipping companies to give South African seafarers a chance.

**Continued**

29) Allowing online studying for postgraduates. Practical simulations at university level.

30) We must make sure that everyone including young ones and adults are exposed to maritime activities which will result to us taking seafaring as our South African culture.

31) In South Africa, we do not have a ship, which makes it hard to get a job. You spend more time at home than at sea.

32) Easing of laws that may be possibly hampering attraction of the country as an investment hub, for more investors to come onboard with their ships. Funding of South Africans who want to be ship owners to be made easy. Industrializing the country, by enabling raw materials to be processed and more products to be made

33) Making sure that all South African seafarers secure jobs at sea just like any other nationalities.

34) Work on attracting more international companies to employ South African seafarers. But firstly, the quality of our seafarers must be improved to justify to these large companies that investing in South African is worth their time. These companies require a high number of quality seafarers than we cannot supply at this moment. Improvement starts at a training level. Aiming to meet the absolute minimum requirements is simply not enough. Our standards need to be raised if we want to compete on a global scale.

35) The South African government could buy merchant vessels so that it will be easy for students coming from varsity to get the required sea time. Also, the government could look to use cabotage and reduce tax for vessels only if they will have a certain percentage of their crew as South Africans.

36) We need more recruiting agencies and more companies to provide employment to seafarers who are still seeking jobs.

37) Allow students enrolled in the Maritime programs in colleges and universities to have an insight of how the sea life is like, by offering them cadetship before they finish their diploma. Make them aware of what the future holds, instead of allowing them to first finish their course before going to sea, which is also a struggle because the jobs are scarce nowadays.

38) More opportunities for women and companies should stop using ablution as an excuse.

39) Do not sell people lies about job opportunities. The jobs out there are scarce and with the rise in Black and Female seafarers getting employed before those more qualified must stop. Give people equal opportunities with regards their qualification and personality rather than their gender/race.

40) Have the SA government enter into agreement with international ship companies to employ South Africans 30% per year. Also seafarers have a strong union which will fight for us and seafarers in order to be valued in this country.

41) The South African government prioritising the addition of South African training berths as well as more partnerships with international shipping companies to train South African seafarers.

42) Marine Studies should be introduced more in High School levels where you still had to decide what career should you go for and on Varsity levels, make sure you also sponsor the practicals during the course.

43) We can have new technology and work with shipping companies as other countries do so it can be easy to find placement

44) I've only did my training on domestic vessels, and honestly, I haven't had a problem onboard vessel. The only thing that's a problem is fewer vessels that we have and more qualified officers that are unemployed South Africa needs to start producing employment for those seafarers.

45) Universities should offer STCW courses as part of the qualification, so that new university graduate can easily be employable. Recruiting companies like an ever-ready candidate that they'll not do any work on, just hire.

46) We could have more manning agencies coax companies to work with South African seafarers because now we are having little to no employment at all

47) Truth.

48) Review SAMSA code for training requirements to ensure that training is aligned and minimized to STCW requirements.

49) Offering more opportunities and improving the countries Maritime Sector as a whole, training the young graduates could improve the seafaring in South Africa.

**Continued**

50) Advancement of seafarer's soft skills at the earlier date

51) When organisations find companies that will employ South Africans as cadet, ensure it does not stop at the cadetship that they also provide employment for them.
To also train us as South Africans especially the younger generations that when you go out there, it is not just for yourself but you are representing every South African.
Some of our training institutes need to be vetted and inspected properly, every now and then a new training place pops up in South Africa and the place does not have accreditation. We need to vet ourselves against the best in the world

52) Some mitigation should be put in place where is comes to fishing vessels

53) A stronger arm in the marine union.

In addition to the responses from seafarers, accredited manning agencies were also asked for feedback. The questions asked and participating manning agencies responses are provided in Table 17 below.

## 11. Analysis and Recommendations

While the survey participants were not as many as would be desired, they were well represented, including officers, ratings and cadets. From the responses provided, while about half of the participants were still cadets, the remaining number was mostly officers with a few ratings. Each group was able to bring a unique perspective to the survey. With regards the gender breakdown, there were almost as many female participants as there were male. This is not in line with the current global norms and meant that the views expressed may not represent the reality of the overall seafarer experience. This imbalance was noted, to prevent bias or generalization of the results. It may also indicate that female seafarers are more likely to respond to survey questionnaires than male seafarers. In analysing survey results, the responses provided were weighed against the current global norms as well as the insights provided by SAMSA and SAMTRA.

From the information provided by participants, the following insights can be made:

1) While cadets were primarily from DUT, CPUT and SAMTRA, there were many alternative training institutes from which seafarers obtained their training. Unfortunately, not all are accredited, as can be seen from the responses.

2) Seafarers have a variety of qualifications, with some having trained themselves beyond the basic training qualifications, although many are still reliant on basic training.

3) For those who have not gone to sea, the waiting time for training berths was generally between 0 and 3 years. This meant that most seafarers did not have a long wait for placement. Others had to wait for 4 to 5 years, which is indeed a long time. It is not known, within the 0-to-3-year period, if the waiting period was closer to 1 year or to 3 years. The fact that some seafarers had to wait for more than 5 years was indeed worrying.

4) For those who were unable to find placement, the main reason provided

Table 17. Responses from manning agencies. (Source: Author)

| No | Question | Response |
|---|---|---|
| 1. | Where is your agency situated | Cape Town, Durban |
| 2, | What is the main purpose of your agency | Seafarer Recruitment and Placement Agency, approved and accredited by SAMSA for MLC compliance and Accelerated Onboard Training Programmes for Deck and Engineering Cadets.<br>Training of seafarers and absorption, is possible |
| 3 | What is your primary language | English |
| 4. | From which country does your company operate | South Africa (4), Egypt (1) |
| 5. | Which category of seafarer do you recruit primarily | Both (3), officer (1) |
| 6. | What are the main recruiting priorities of your clients | Cost (3), Recognized certificates (3), Age, Gender (2) Ability to fit with existing crew (1) |
| 7. | What are the main qualifications you require of ratings | GPRAII STCW Mandatory courses<br>Specialized certificates of proficiencies |
| 8. | What are the main qualifications you require of officers | Management Level Competency and Specialized certificates e.g., DPO's, tanker experience<br>National Diploma (nautical sciences)<br>National Diploma (marine engineering) |
| 9 | How many years working experience do you generally require of ratings | 1 to 3 years,<br>4 to 5 years |
| 10 | Under what circumstances are domestic qualifications considered sufficient | Under SA registered vessels<br>If SAMSA requirements are met for any sea-going vessels. |
| 11 | Is the place where a seafarer obtained their qualification important | Yes |
| 12 | If yes, why | For recognition of accreditation and compliance,<br>Not all qualifications are recognized in South Africa, hence the SAQA and SAMSA requirements must be adhered to. |
| 13 | As ships become more automated, have recruitment patterns changed | No and yes. Applicable certification required before going on-board. |
| 14 | As ships become more automated, which of the following criteria have become important | Certification and ability to handle both sea and shore-based roles. |
| 15 | How popular are South African seafarers with recruitment agencies | Popular, somewhat popular |
| 16 | How popular are South African officers | Popular, somewhat popular |
| 17 | Why are South African seafarers not most preferable compared to other nationalities | Lack of experience, work ethic |
| 18. | What would be required to increase the popularity of South African seafarers | Greater technical skills, more shore-based skills |
| 19. | Have you recruited South African seafarers previously | Yes, all ranks in deck, engineering, and catering departments, ratings and officers |

**Continued**

| 20 | What are your experiences with South African seafarers | Wiling and keen to work, attitude is sometimes not acceptable |
|---|---|---|
| 21 | If you have placed South African seafarers, on which vessels are they most popular | Container vessels, tankers |
| 22 | Do you feel that South African seafarers are suitable skilled for the changing shipping environment | Yes, not sure |
| 23 | What changes do South Africans need to make to become more marketable | Gain specialized skills and certification, be more versatile, understand the global economy, before disciplined. |

was the lack of training berths, while for others, it was inadequate certification.

5) For most seafarers, their South African training was recognized, although they had to do additional training to be able to sail aboard international ships. These trainings, while some were ship specific, as in the tanker certificates, were mostly related to safety and security on board.

6) While the seafarers had worked aboard many types of ships, the ships most likely to accept South African seafarers were indeed Tankers and Container ships, as identified by the placement agencies.

7) The main issues which affected South African seafarers on board foreign vessels were the language barrier, cultural differences and communication. Other facts included barriers to advancement, racial discrimination, bullying, insufficient skills as well as sexual abuse.

8) There was an understanding amongst seafarers that they needed to advance their careers through increased training. The skills which they deemed most necessary for advancement were digital and technical, language and communication as well as administration.

9) While many seafarers wanted to advance their education, they cited lack of funding for basic, intermediate and advanced training as the biggest barrier to training.

10) While most of the seafarers understood that there was a movement towards more shore-based positions, more than half of them did not have any shore-based qualifications. Of those who did, many of these skills were none maritime related.

11) Of the participants surveyed, almost half were unemployed students. Others were employed as seafarers while a few we employed in the secondary maritime services sector and a few were not in the maritime sector, working at Nandosor as cleaners.

12) Most participants felt that they were prepared for the new shipping normal, although they also felt that they needed more specialized qualifications to be more marketable.

13) On the question of increased marketability, while they realized that they needed to improve their skills, many felt that the onus was on the government to clear the way for greater acceptance of South African seafarers. There was also

the view that, until the issue of training berths was dealt with, training institutions should decrease the number of seafarers being trained.

14) Most of the seafarers belonged to manning agencies, with the majority working through SAMTRA. A few seafarers were placed with international agencies.

15) Most participants did not regret their decision to become seafarers.

16) The responses of the procurement agencies aligned with the seafarer responses, with the agencies confirming that South Africans were popular on tankers and container vessels. They also confirmed that there was a need for seafarers to have more technical and shore-based skills,

17) One of the things working against the placement of South African seafarers, apart from lack of work experience, is a lack of work ethic and bad attitude. This can also be gleaned from the seafarer responses, where some seafarers mentioned that increased discipline would assist with their career advancement.

From the responses of both the seafarers and the manning companies, there is an understanding of the changing tide within the maritime shipping sector. Those on the frontlines are witnessing the impacts of increasing technology on board vessels. This is manifesting in their understanding of their need for increased technical and digital skills. On the other hand, the fact that they must work on foreign vessels has increased their understanding of the impacts of cultural differences on communication and language, with their inability to communicate being a real barrier. In addition to the above, there are the issues of bullying, verbal abuse and sexual abuse on vessels that are seldom spoken of or dealt with openly. As expressed by respondents, there is a need for these issues to be aired so that new cadets are aware of the issues they will be facing aboard vessels. The seafarer community is an extremely small community, which is highly reliant on the good will of foreign ship owners. While our seafarers have spoken of unionization and the protections of domestic unions, they do not appear to be aware of the limitations of the reach of the South African government. Some spoke of MOUs and quotas, even cabotage rules. There does not appear to be a proper comprehension of the power of the shipping company alliances and their ability to dictate terms to the various governments. With increased vertical integration and the acquisition of smaller regional shipping-lines by dominant global players, discussions with these major groups are mostly at the will and pace of global shipping lines, as opposed to the individual governments. While SAMSA has authority to deal with abuses within its waters, and within its jurisdictions, where South African seafarers are in international waters, they are reliant on the reach of international unions like the International Transport Federation. On the same issue of union activity, our seafarers seem unaware that militant protection of their rights on global vessels is one of the factors that has worked against their placement on foreign vessels. This could also be attributed to their lack of understanding of the overall global shipping sector and the precariousness of their position, which depends not only on supply and demand dynamics but also the ability of cadets to align with the needs of shipping lines.

In an environment where time is money and supply chain security is key, loose cannons are not tolerated.

Another matter which has been touched on by seafarers and procurement agencies is the need to begin to align with the increased demand of seafarers with technical and digital skills, At present, the basic university seafarer programmes, do not go far enough to deal with these requirements.

Given the above factors, the following interventions are recommended:

1) Current training programs are evaluated, and modules included to align with the changing global technical and digital shipping norms.

2) Modules and training on cultural norms and communication be included in seafarer training programs.

3) Seafarers should also be introduced to on-board etiquette and taught how to deal with things like bullying without violence or sit-downs,

4) There should, in addition, be portals for the communication of abusive behaviors' to SAMSA or SAMTRA, so that the vessels responsible be noted and dealt with.

5) To ensure that there is alignment with SA and global qualifications, as well as IMO Maritime Conventions, all training institutions should be SAMSA aligned, and no non-accredited training institutions should be allowed to operate.

6) Funding should be made available to maritime universities for simulators, and agreements be made with shipping lines for simulator training to be part of the recognized practical experience required of seafarers.

7) While awareness of seafaring as a career should be made known at high school level, the truth about the shipping sector as a viable career path should be expressed as well, allowing learners to make informed choices.

8) Given that the demand for ratings is likely to decrease, more effort should be made to develop South Africa as a hub for specialized officer training.

9) University enrollment policies should be aligned with SAMSA and other procurement agency requirements, to ensure that there is not an oversupply of officers,

10) There should, in addition, be decisions made regarding the upgrading of qualifications of our current seafarers. It should be noted that shipping lines require experienced seafarers and investment made into those seafarers over 40 together with the current cadets,

11) Decisions should be made regarding how South Africa can work with shipping lines to meet the growing requirement for shore-based skills, Given that decisions by shipping lines will also be impacted by the efficiency of renewed fuels, security and supply chain requirements and risk assessments of the different governments, South Africa should work to reduce its risk profile and work with shipping lines so that it can be included in their future plans. Decisions should therefore be made regarding capacity to meet bunkering needs and security in individual ports.

## 12. Conclusion

While seafaring is only one function within the global shipping supply chain, it is still an important one. Given that human error has been identified as one of the biggest risks to ship safety, it is understandable that, as ship owners invest more in the hardware of their ships, they want to secure and protect their investments. This means that the ability of the human element to create systemic bottlenecks is reduced. The more seafarers can align with the needs of shipping companies, the more desirable they will be. On the other hand, given that the seafarer of the future will need to be a hybrid, part seafarer and part technician, and able to fulfill multiple functions and roles, it is likely that, the seafarers who are able to meet the increased skills demand of the shipping community; their value will increase along with their value-added potential. It is likely that, as fewer specialized seafarers are sought, their salaries will increase as well. Governments that can work with the shipping sector, anticipate the changing tide and form alliances and collaborative agreements with these maritime behemoths, will be the most likely to secure a promising future for their seafarers. It is therefore incumbent on the individual governments to reach out to the shipping sector, given the competitive nature of the global seafarer environment.

## Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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## Directory of Common Shipping Terms

| Term | Meaning and context of use |
| --- | --- |
| Flags of convenience | Every ship carries a flag representing the country at which it is registered. In the past, ships could only register with their national registries. For purpose of convenience, some countries opened their registration to ships from other nations. The attraction of this change is that it enabled ship owners to trade under less stringent trading conditions and choose labour from the global labour pool, as opposed to being limited to domestic labour. These become registries of convenience and the ships flying these flags were known to be flying flags of convenience. |
| Officers | Ships officers navigate and supervise the safe operation of ships at sea. In port or at anchor. They coordinate the activities of the crew and control cargo stowage, loading and unloading operations. They are normally deck officers or engineering officers. |
| Registry (closed) | Where a country only permits its citizens to fly its flag, this is known as a closed registry. Ships registered under a closed registry system are bound by domestic labour laws and are only permitted to use domestic labour, regardless of how costly or inefficient this labour is. |
| Registry (open) | Where a country permits ships from other countries to fly its flag. These ship-owners may choose labour from the global labour market and are usually bound by less stringent laws and provisions. |
| Ratings | Merchant navy ratings assist in the running of their ships and assist in the deck, engineering, and catering departments. their work depends on the department in which they work. Due to increased automation and smaller staff, ratings will perform multiple tasks within a particular role. |
| Seafarers | A person who is employed to serve aboard any type of marine vessel. |