

**ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΕΙΡΑΙΩΣ**



**ΤΜΗΜΑ ΝΑΥΤΙΛΙΑΚΩΝ ΣΠΟΥΔΩΝ**  
**ΠΡΟΓΡΑΜΜΑ ΜΕΤΑΠΤΥΧΙΑΚΩΝ ΣΠΟΥΔΩΝ**  
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**ΝΑΥΤΙΛΙΑΚΗ**  
**ΔΙΟΙΚΗΤΙΚΗ**

**The application of MLC & STCW at the Crew  
department of a shipping company**

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Διπλωματική Εργασία

που υποβλήθηκε στο Τμήμα Ναυτιλιακών Σπουδών  
του Πανεπιστημίου Πειραιώς ως μέρος των  
απαιτήσεων για την απόκτηση του Μεταπτυχιακού  
Διπλώματος Ειδίκευσης στην Ναυτιλιακή Διοικητική  
Πειραιάς

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## ABSTRACT

This thesis analyzes the regulations and obligations of the IMO International Convention, STCW, and MLC which concerns the qualifications of seafarers aboard the ship and their formal and substantive certification in order to upgrade the factor Human Labor on board for better and safer modern shipping. Moreover, focuses to understand the seafarer's ranks on board a vessel and all the steps in the process of integrating a seafarer into a shipping business. The most important aim of this thesis is to acknowledge the requirements and characteristics that the crew department must meet, as a responsible department of seafarer's introduction to a shipping company and in general the proper manning of all its ships. Part of this process is the proper control of the compulsory and ' non ' certificates to be held in the file of a candidate. Next, the usual process of travel to and from the ship as well as seafarers evaluation procedures.

## ΠΕΡΙΛΗΨΗ

Το πρώτο κεφάλαιο αυτής της εργασίας αναλύει τον Διεθνή Ναυτιλιακό Οργανισμό και τη θέσπιση των διεθνών συμβάσεων για την προστασία της θαλάσσιας ζωής στη θάλασσα (SOLAS) και τη ρύπανση της θάλασσας από τα πλοία MARPOL και τον διεθνή κώδικα ασφαλούς διαχείρισης. Στη συνέχεια, στο δεύτερο κεφάλαιο, απαριθμούνται η αρχική Διεθνής Σύμβαση STCW 1978 και οι αναθεωρημένες συμβάσεις 1995 και 2010 και αναλύονται οι τροποποιήσεις, με επίκεντρο τις γενικές απαιτήσεις πιστοποίησης της επάρκειας του πληρώματος. Τα πιστοποιητικά διακρίνονται σύμφωνα με τις απαιτήσεις του τροποποιημένου STCW 2010. Στο τρίτο κεφάλαιο γίνεται αναφορά στους ελέγχους των εταιρειών ταξινόμησης και του κράτους του λιμένα. Στο τέταρτο κεφάλαιο εξετάζουμε τους λόγους που οδήγησαν στη νέα Σύμβαση Ναυτικής Εργασίας MLC2006 και τα ζητήματα που καλύπτει και τις προκλήσεις που συνδέονται με την εφαρμογή της. Στα κεφάλαια πέντε και έξι αναλύουμε την περιγραφή της θέσης κάθε βαθμίδας του ναυτικού, τους ρόλους και τις ευθύνες της ναυτιλιακής εταιρείας και του τμήματος πληρώματος σύμφωνα με τα πρότυπα MLC, STCW και ISM, τους παράγοντες επάνδρωσης και τη συνήθη διαδικασία ταξιδιού προς και από το πλοίο έως ότου επανατοποθετηθεί, καθώς και η διαδικασία επιλογής και κατάρτισης των ναυτικών. Το κεφάλαιο οκτώ αναλύει τις διατάξεις της σύμβασης με τους ασφαλιστικούς τόκους, δηλαδή την αποζημίωση του ναυτικού καθώς και τον επαναπατρισμό και την κοινωνική ασφάλιση. Τέλος, στο κεφάλαιο εννέα εστιάζουμε στην αξιολόγηση του ναυτικού, η οποία θα κρίνει την καριέρα του, τη φήμη της εταιρείας, την ποιότητα των υπηρεσιών στις εργασίες επί του πλοίου κ.λπ.

## INTRODUCTION

The first chapter of this thesis analyses the IMO International Maritime Organization and the setting up of the international conventions for the protection of life at sea SOLAS, and the pollution of the sea by MARPOL ships and the International Safe Management Code. They refer to seafarers' work and aim at optimizing the working conditions of seafarers and shipping in general. Then, in the second chapter, the original International Convention STCW 1978 and the revised Conventions 1995 and 2010 are listed, and the amendments thereto are analyzed, with a focus on the general requirements for certification of competence for officers and lower rankings of the deck and engine. Certificates shall be distinguished according to the requirements of the amended STCW 2010. In chapter three, a reference is made to the Classification societies and port state controls. In chapter four, we examine the reasons that led to the new Maritime Labor Convention MLC2006 and the issues it covers and the challenges associated with its implementation. In chapters five and six we are analyzing the job description of each seafarer's rank, the roles and responsibilities of the shipping company and crew department according to MLC, STCW and ISM, the manning agents' and the usual process of travel to and from the ship until it is remounted as well as the selection and training procedure of the seafarers. Chapter seven corresponds to the selection and training procedure of the seafarers. The chapter eight analyses the provisions of the contract with insurance interest, namely the compensation of the seafarer as well as the repatriation and social security. Lastly, at chapter nine we focus on the seafarer's evaluation, which will judge his career, the reputation of the company, the quality of services in the work on board, etc.

# **CHAPTER 1: THE INTERNATIONAL MARITIME ORGANIZATION (IMO) AND INTERNATIONAL CONVENTIONS**

## **1.1 Introduction**

It is commonly known that, the shipping industry impacts our everyday life and it is the most efficient and cost effective way of transportation of goods around the world.

Shipping is an international industry and in order to be safely operated there must be strict rules and regulation standards followed.

In such a large number of employees and ships the issue of safety and the prevention of accidents is essential for the sound functioning of shipping services.

To ensure that ships are manned with adequate qualified, skilled, certificated and medically fit seafarers must be in accordance with national and international requirements, as well as in line with the high standard company has set up.

The responsibility for the implementation of the above is held by the International Maritime Organization which is a specialized agency of the UN. Its primary purpose is to develop and maintain a comprehensive regulatory framework for shipping and its remit today includes safety, environmental concerns, legal matters, technical co-operation, maritime security and efficiency of shipping. The work of IMO is conducted through five committees and these are supported by technical subcommittees. Other UN organizations may observe the proceedings of the IMO.

To achieve the above strategic objectives, the IMO adopts International Conventions and Codes and encourages its Member States to incorporate and implement them.

The four pillars of IMO are:

### **1.1 International Convention for the Safety of Life at Sea (SOLAS):**

The SOLAS Convention in its successive forms is considered to be the most important of all international maritime safety treaties<sup>2</sup>. The main objective of the SOLAS Convention is to define minimum standards that are consistent with their protection for the building, equipment and operation of vessels. Flag States are responsible for ensuring that ships flying their flag meet their requirements and that the Convention issues such certificates as proof that this has been achieved. The control provisions also allow Flag States to inspect the ships of other Flag States if there are clear reasons to believe that the ship and its equipment do not substantially comply with the requirements of the Convention - this process is known as port State control. The current SOLAS Convention contains articles setting out general obligations, modification procedure, etc.,

### **1.2 The International Convention for the Prevention of Pollution from Ships (MARPOL):**

MARPOL is the main international convention covering the prevention of marine pollution by ships for operational or accidental reasons<sup>3</sup>. It does not have any geographical limits and applies to all maritime areas. It is not about marine areas, it is about ships. It also extends to inland



waters in coastal areas including bays, ports and so on. The Convention includes regulations to prevent and mitigate ship emissions-both unintentional and normal-and now comprises six technical annexes such as regulations for the prevention of oil pollution, regulations for the control of pollution by dangerous liquid substances in bulk, prevention of pollution from harmful substances transported by sea in packages, containers, portable tanks or tankers, prevention of sewage pollution from ships, prevention of pollution from ship waste, prevention of air pollution by ships

### **1.3 The International Safety Management (ISM) Code:**

ISM code provides an international standard for the safe management and operation of ships at sea<sup>4</sup>. The Code, when setting goals, requires the creation of a security management system (SMS) by the Company, which must establish and implement a policy to achieve these objectives. This includes providing the necessary resources and support onshore. The procedures required by the code must be documented and drawn up in a safety management manual, a copy of which must be kept on board. Certifying the implementation of the ISM Code is an advantage for a company. The inspection and certification process is the responsibility of the classification society and must be carried out in accordance with ISM standards.

### **1.4 International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW):**

STCW is the only maritime code that started from the needs of shipping companies. It seeks to create a benchmark for training of seafarers around the world, with a focus on quality control and competency-based training, and establishes a structure that can ensure not only that standards are met, but that they appear to be fulfilled.

The STCW Convention will be deeply analyzed in the following chapter.

## **CHAPTER 2: THE ANALYSIS OF THE INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS (STCW)**

### **2.1 Introduction**

It is well known that almost 80% of traffic accidents are due to human error. It is the human element on board that can either provide the skills that can prevent a disaster, or the weakness or lack of competence that can cause a disaster. And, while the skill, complexity, and enormous power of technology seem to be exponentially accelerating, the human element remains an essential ingredient with all its strengths and weaknesses.

The safe and efficient operation of ships has a direct impact on the safety of human life at sea and on the protection of the marine environment. So it's based on the ability of seafarers to work efficiently for the vessel. The key to maintaining a safe marine environment and preserving our clean oceans lies with all seafarers around the world, observing high standards of competence and professionalism in the tasks they perform. A well-trained and certified crew in relation to an unskilled crew, it is clear how it will lead to a smoother operation of the ship and minimize the occurrence of maritime accidents due to human error that may result in damage to equipment. Unless otherwise stated, a simple incident can turn into a serious accident due to the human factor. Therefore, there is a serious financial incentive to assess the risks arising from human error and to take measures to limit the risks.

It is important to note that the maritime profession differs from the rest and the working conditions are peculiar in so far as they are affected by adverse weather conditions, changing climatic conditions, the security of the cargo carried and the psychological state of the seafarer who is required to do so, staying aboard and undergoing interpersonal relationships sometimes enjoyable and sometimes unpleasant.

The human factor, however, consists not only of the crew on board the ship, but also of the employees of a shipping company. Their harmonious co-operation based on a common culture will work best.

The Convention on the Standards of Training, Certification and Watchkeeping for Seafarers (STCW) is a comprehensive set of international regulations designed to ensure the maintenance of the highest standards of seafarer competence worldwide. The rules apply not only to seafarers but also to shipowners, educational institutions and national maritime authorities. In essence, the above-mentioned stakeholders have a common goal, the ship's smooth operation and hence the preservation of a healthy marine environment.

The STCW Convention is a book consisting of three sections. The articles which outline the legal responsibilities a party has to meet, the annex which gives technical details on how the legal responsibilities referred to in the articles should be met and the Code which specifies in more depth the technical details contained in the annex. It contains part A and part B. The Part A refers to the mandatory standards of training, certification and watch-keeping and the Part B is recommended guidelines on training, certification and watchkeeping.

## 2.2 The STCW 78 Convention

International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, was adopted on 7 July 1978 and entered into force on 28 April 1984. Focused almost entirely on the theoretical knowledge that seafarers must possess, attempted to introduce the necessary standards for training, the issuance of associated certificates, watchkeeping and crew safety, and to identify and evaluate the qualifications of officers for ensuring the safe and efficient operation at sea that countries are required to meet or exceed.

The ultimate goal was to curb the widespread diplomatic fraud that had spread especially to the Far East countries. It also seeks to accept and submit all Port State control certificates.

In general, STCW '78 focuses on the human factor including 17 articles, while technical requirements are included in a specific annex. Its components relate to the general provisions relating to control procedures, those relating to master and deck, engine room, radio communications, to specific requirements for tankers as well as to the specific capabilities required when one is on board a rescue vessel.

## 2.3 The Revised STCW Convention 1995

On 7 July 1995, the IMO carried out a comprehensive review of the STCW to resolve the recognised need to amend the contract and to respond to critics who stressed the many ambiguous terms, resulting in different interpretations containing the technical details of the contract provisions. The amendments entered into force on 1 February 1997. The Contracting Parties to the STCW'95 Convention must fully comply with the requirements of the STCW'95 Convention from 1 February 2002.

The STCW-95's focus has moved to theoretical expertise-based practical skills and competencies. Generally speaking, the aim of the amended STCW 1995 is to integrate the learning, verification and assessment of the knowledge of seafarers (i.e., competence, perception and most established skills).

A feature of the revision was the division of the technical annex into chapters, as before, and a new STCW code, in which many technical regulations have been transposed. The Code deals with issues of quality promotion of maritime training, qualifications and conditions of teaching staff and various other instructions related to the provision and recognition of education. Part A of the Code is compulsory while Part B is recommended. The rules in the Annex to the Convention are similar to the numbering used in the Code.

Another major change was the requirement for the contracting parties to provide detailed information to the IMO on the administrative measures taken to ensure compliance with the contract. This is the first time IMO has been called upon to comply with compliance and enforcement - in general, implementation is implemented in flag states, while port state control also ensures compliance.

According to Chapter I of Regulation I / 7 of the Revised Convention, the Contracting Parties are required to provide detailed information to the IMO on the administrative measures taken to ensure compliance with the Convention, education and training courses, certification procedures and other factors relevant to implementation.

The requirements apply to seafarers on board vessels (irrespective of vessel size) and have the right to fly the flag of a member of the STCW Convention, except for warships, fishing vessels, pleasure crafts and wooden vessels constructions. The Convention stipulates that officers are required to have knowledge of the serious impacts of marine pollution resulting from operational discharges by ships, as well as that resulting from

Procedures are also set out to be disclosed in order to trace the qualifications of all crew nationalities. At the same time, applicants' ages, mental and physical health, as well as required service will be assessed for the relevant certificates.

Shipping companies must ensure that seafarers have undergone appropriate training with safety issues, on-board management issues and the length of time off from rest of work purposes and must enhance the conviction of all officers that to be actively involved in the training of new crews as well as to evaluate and review regularly the development of new staff in the acquisition of new knowledge and skills during their service.

Compliance with the above depends on the policy of the respective authorities. The Convention stipulates that the flag states and coastal states should impose penalties on shipping companies that deliberately do not comply with the new requirements.

The key requirement of the amended STCW 1995 Convention is the guaranteed identification of seafarers' qualifications through certification, guided sea voyage training as well as the imperative need for all seafarers to be proficient in English.

#### 2.4 The Amended STCW 2010 Convention

The Manila 2010 amendments were intended to include all changes agreed since 1995, tackling new technology, inconsistencies, interpretations and outdated provisions. Particular emphasis has been placed on improving the provisions in Chapter 1 on the control and communication of certification and addressing the specific requirements of offshore and short sea shipping.

There was also a general commitment to harmonize the modified STCW Convention where applicable with the provisions of the Maritime Labor Convention (MLC) 2006. Although the STCW-78 Convention focused almost exclusively on knowledge, its emphasis has shifted to practical skills and competencies supported by theoretical knowledge.

The 2010 amendments continued to emphasize competence rather than maritime service or training. The standard set by this Convention applies to seafarers of all grades serving on merchant vessels registered under the flags of the countries party to the Convention.

Among the amendments adopted, there are a number of significant changes to each chapter of the Convention and the Code, including:

- Improved measures to prevent fraudulent practices related to certificates of competence and to enhance the evaluation process (monitoring compliance by the Parties to the Convention).
- New certification requirements for competent seafarers
- Revised requirements on working and rest hours, which include minimum rest periods of three periods and no longer two, and new requirements for the prevention of drug and alcohol abuse, as well as updated standards on seafarers' medical fitness standards.
- New requirements for training in modern technology, such as electronic maps and information systems (ECDIS).
- New education and training requirements for maritime environment awareness and leadership and teamwork and compliance with the MARPOL Convention: the amendments include adding maritime awareness issues to the lesson on personal safety and social responsibility which is carried out in the context of Basic Safety Training.
- New training and certification requirements for electrical engineers
- Updating the adequacy requirements for personnel serving all types of tankers, including new requirements for personnel serving liquefied gas tankers.
- New requirements for safety training, as well as provisions to ensure that seafarers are adequately trained to handle if their ship is attacked by pirates.
- Introduction of modern training methodologies, including distance learning and online learning.
- New training guidelines for personnel serving ships operating in polar waters.

Some other amendments have been introduced with the 2010 amendments to align the STCW with the MLC-ILO are:

### **Recordkeeping Program:**

Importantly, the 2010 amendments require that individual seafarers' rest time records be kept in order to demonstrate compliance. Unless the flag status requires otherwise, these records must comply with the modern formats agreed by the IMO and ILO in the published guidelines. It is important that these records can be inspected by port State control as of January 2012. Each separate record of rest hours must be signed by the seamen they cover. It should be noted that minimum rest requirements apply to every 7 days of any 24-hour period (without calendar days) and the calculations required to check compliance are complex, especially if seafarers often deviate from their normal scheduled working hours. Therefore, it is recommended to use the system-based recording system for rest hours.

## **Registration and Schedule:**

STCW also requires companies to maintain on-board schedules of work arrangements, stating the normal working hours for various seafaring categories, which must be posted on board at an easily accessible point. Unless the flag status requires otherwise, the format must also comply with that recommended by the relevant IMO-ILO guidelines.

### **2.5 STCW Certificates**

The term ‘certificates’ covers all official documents required under STCW. It includes certificates of competence, endorsements, certificates of proficiency, and any documentary evidence showing that a requirement of the convention has been met.

Certificates are important as they are the main paper evidence you have on hand to prove that your level of maritime education and training, your length of service at sea, your professional competence, medical fitness and age all comply with STCW standards. Every party to the convention has to ensure that certificates are only issued to those seafarers who meet STCW standards.

More specifically:

1. Certificate of competence: This document is issued to masters, officers, radio operators and ratings forming part of a watch who meet the standards of competence relevant to their particular functions and level of responsibility on-board. The table below indicates the title of the certificates under STCW and the various limitations and tonnage thresholds that apply
2. Endorsement: A document issued to masters and officers, either as part of the certificate or as a separate document. This attests (endorses) that the national certificate has been issued in accordance with all STCW requirements
3. Endorsement of recognition: This endorsement certificate is issued by an administration as an official recognition of the validity of a certificate issued by another administration. This procedure is necessary as many merchant fleets are manned by seafarers certificated by other administrations. Under the 2010-amended STCW Convention regulation I/2 all seafarers serving on foreign ships must obtain an endorsement.
4. Certificates of proficiency: These are documents issued to the seafarer to certify that he or she has met the required standard of competence in a specific duty. These certificates include certificates for personnel serving on certain types of ship (tankers, and passenger ships) and for those assigned with safety, security and pollution prevention duties. It certifies that the holder meets STCW standards of competence in specific functions related to safety, care of persons, or cargo.
5. Certificates and general requirements by rank Documentary evidence: This is a document which is not necessarily issued or recognised by the administration (and is not, therefore, called a certificate). Documents issued by the ship owner or master of the vessel to attest that the seafarer has participated in a safety drill or has completed some type of training

(for example familiarization training) are examples of documentary evidence. It is important to keep these documents since they are one of the accepted ways of demonstrating that you have achieved proficiency in a given task (basic safety training, for example). Where such evidence is not available of on-board training and experience you will be required to undergo a five yearly refresher trainers and assessors.

The question itself is whether the ongoing revision of the STCW Convention is sufficiently comprehensive to resolve all the existing problem areas and disadvantages in the current implementation of the Convention or is it simply updating the curriculum to cope with the rapid technological advances in the shipping sector. Nonetheless, in the ongoing revision of the STCW Convention, which poses the need for additional work and revision of the Convention in order to achieve its goals of ensuring maritime security and protecting the environment by raising the global professional standard of seafarers, numerous shortcomings, unattained artifacts and deficiencies in the implementation phase are not addressed.

Below there is a matrix of mandatory certificates according to STCW for the top four crew members on board a ship.

#### Master

NAME OF CERTIFICATE	REVALIDATION	REG.	
National certificate of competence and endorsement	Yes	I/2, II/2,	C/R
Flag state endorsement of recognition	Yes	I/10	E/R
GMDSS endorsement	Yes	IV/2	C/R
Basic safety training - Personal survival techniques - Fire prevention and fire fighting - Elementary first aid - Personal safety and social responsibility	Achieved within previous five years	VI/1	D/P
Medical first aid	No	VI/4	D/P
Survival craft and rescue boats	Yes	VI/2	D/P
Advanced fire fighting	Yes	VI/3	D/P
Medical fitness	Yes	I/9	C/R
Basic safety familiarisation	On assignment	VI/1	T/O
Ship specific familiarisation	On assignment	I/14	T/O
Security familiarisation	On assignment	VI/6	T/O

C/R certificate required, D/P Documentary proof, T/O Training onboard, E/R Endorsement required.

#### Chief engineer

NAME OF CERTIFICATE	REVALIDATION	REG.	
National certificate of competence and endorsement	Yes	I/2, III/2, III/3	C/R
Flag state endorsement of recognition	Yes	I/10	E/R
Basic safety training - Personal survival techniques - Fire prevention and fire fighting - Elementary first aid - Personal safety and social responsibility	Achieved within previous five years	VI/1	D/P
Medical first aid	No	VI/4	D/P
Survival craft and rescue boats	Yes	VI/2	D/P
Advanced fire fighting	Yes	VI/3	D/P
Medical fitness	Yes	I/9	C/R
Basic safety familiarisation	On assignment	VI/1	T/O
Ship specific familiarisation	On assignment	I/14	T/O
Security familiarisation	On assignment	VI/6	T/O

C/R certificate required, D/P Documentary proof, T/O Training onboard, E/R Endorsement required.

#### Chief mate

NAME OF CERTIFICATE	REVALIDATION	REG.	
National certificate of competence and endorsement	Yes	I/2, II/2,	C/R
Flag state endorsement of recognition	Yes	I/10	E/R
GMDSS endorsement	Yes	IV/2	C/R
Basic safety training - Personal survival techniques - Fire prevention and fire fighting - Elementary first aid - Personal safety and social responsibility	Achieved within previous five years	VI/1	D/P
Medical first aid	No	VI/4	D/P
Survival craft and rescue boats	Yes	VI/2	D/P
Advanced fire fighting	Yes	VI/3	D/P
Medical fitness	Yes	I/9	C/R
Basic safety familiarisation	On assignment	VI/1	T/O
Ship specific familiarisation	On assignment	I/14	T/O
Security familiarisation	On assignment	VI/6	T/O

C/R certificate required, D/P Documentary proof, T/O Training onboard, E/R Endorsement required.

#### Officer in charge of a navigational watch

NAME OF CERTIFICATE	REVALIDATION	REG.	
National certificate of competence and endorsement	Yes	I/2, II/1, II/3	C/R
Flag state endorsement of recognition	Yes	I/10	E/R
GMDSS endorsement	Yes	IV/2	C/R
Basic safety training - Personal survival techniques - Fire prevention and fire fighting - Elementary first aid - Personal safety and social responsibility	Achieved within previous five years	VI/1	D/P
Medical first aid	No	VI/4	D/P
Survival craft and rescue boats	Yes	VI/2	D/P
Advanced fire fighting	Yes	VI/3	D/P
Medical fitness	Yes	I/9	C/R
Basic safety familiarisation	On assignment	VI/1	T/O
Ship specific familiarisation	On assignment	I/14	T/O
Security familiarisation	On assignment	VI/6	T/O

C/R certificate required, D/P Documentary proof, T/O Training onboard, E/R Endorsement required.

## Certificates and general requirements by rank

## **CHAPTER 3: CLASSIFICATION SOCIETIES AND PORT STATE CONTROLS**

### **3.1 Introduction**

Ship owners must ensure that their vessels are properly maintained and controlled to keep it in line with all relevant international standards and requirements. As long as the maintenance and operation of the ship are properly working, then deficiencies will be avoided during inspections. This involves keeping shipboard records correctly, checking the validity of all certificates and documents, and verifying all applicable survey dates for groups and legal surveys.

In this chapter we will focus on the role of Classification Societies and Ports State Controls and how this applies to the maritime industry.

### **3.2 Classification Societies**

Classification is, in reality, a very old process that started more than two centuries ago. Initially, when the term 'class' was developed, it was meant to determine the condition of ships that underwriters needed to know in order to assess the risks they faced. Until today, however, classification is still important for shipping insurance, and there are clear provisions in insurance contracts that insurance companies do not insure non-classified vessels. While technically providing a class is not compulsory, in practice, certain factors such as the binding of international instruments and the necessity of calculating insurance premiums for ships compel shipowners to provide classes for their operating vessels. As time goes by, classification by classification societies is developed by improving technology.

The classification societies are organizations that have as their work the increase of the safety of life at sea by ensuring high technical specifications in the design, construction and maintenance of ships.

They are non-profit organizations that do not distribute profits, but base their operations on their customers' payments. Despite their importance, the classification societies have no regulatory role. It is not required by a shipowner to obtain a class certificate, however, such a certificate is deemed necessary in order to be insured. The services offered by classification societies are linked to the development of rules and their implementation.

Each classification society is managed by a board consisting of shipowners, charterers, shipbuilders, insurers and shipping. The BOARD elects a person from its members, who assumes the duties of CEO. When a member has an interest from a ship then he is not allowed to attend the board meeting for his classification or renewal of his class. This member may also not be elected as CEO. Several classification societies do not have the role of CEO. Instead there is a standing committee which decides jointly on all matters of concern to the agency.

The classification society often organizes technical committees and councils. These committees involve individuals who are in the field of naval and shipbuilding industries, masters, engineers and people involved in research and cover the wide range of maritime activities and sciences. They monitor trends in naval technology around the world and can be catalytic in the role of classification society. The main responsibility of the committees is to check all the data collected



during the inspections and the presentation of the findings to the Directorate of Classification Society. In addition to the classification and control services, the organizations offer studies and technical advice to their clients.

British Classification Society Lloyd's Register, who is the largest classification society in the world, has been empowered by more than 100 States to carry out inspections and issue certificates. The biggest classification societies gather in their ranks staff with technical expertise and experience. Lloyd's Register employs more than 3900 employees, half of whom are engineers and maintains 260 offices around the world. Its staff performs compliance inspections in the rules which the classification society himself sets, the compliance certifications provided by the regulations in their international treaties. Codes and protocols, as well as a range of engineering services.

### 3.3 Port State Control (PSC)

Port State Control is the exercise of a port State's right to inspect a ship in order to ensure that it meets international safety, pollution and other criteria when it grants permission to a foreign flagged vessel in order to enter a port is done by the Port State Controls.

Port State Control was developed as a means of proactively complementing the position of flag States with the primary objectives of improving the protection of ships and removing under-standard vessels. It involves inspections of various aspects of a vessel once it arrives at sea, including protection of life and property on board the ship, prevention of water pollution, and living and working conditions.

In January 1982, 14 states signed the Memorandum of Understanding on Ship Control, otherwise known as the Paris Memorandum of Understanding (MoU). Paris Memorandum of Understanding (MoU) has been in operation since July 1982 and over time other Member States have been added, such as Greece. For the first time, a regular and systematic inspection of ships is operated by a local group of port states that are party to the relevant conventions. The Paris MoU acts as a model on which the international community relies on PSC audits.

After the Paris MoU, other MoUs have also been signed including the Tokyo MoU (for the Pacific Ocean), Acuerdo Latino MoU (For South and Central America), Caribbean MoU (For the Caribbean), Mediterranean MoU, Indian MoU, Abuja MoU (The West and Central Atlantic Ocean near Africa), Black Sea MoU, Black Sea Riyadh MoU (For the Persian Gulf).

The ultimate goal is to ensure that foreign ships approaching ports are compliant with International Regulations. Essentially, it is an international control network based on common standards such as STCW 2010, MARPOL, SOLAS, ISM etc. and serves common goals. It functions as the key mechanism to ensure that foreign flag vessels arriving at a port have the necessary certificates and documents and check the compliance of ships with international safety regulations and regulations, the suitability of the machinery and equipment used for the type of voyage performed, the suitability of the working environment for the vessel and crew. Also,

checks whether there is any risk of contamination of the marine environment and any deficiencies that considered significant by the inspector and the ship's overall fitness to perform the voyage and covers requirements set by Community of European ship



## **CHAPTER 4: THE INTERNATIONAL LABOR ORGANISATION (ILO) AND MARITIME LABOR CONVENTION (MLC 2006)**

### **4.1 Introduction**

It was a time during the 20<sup>th</sup> century that, it was strongly believed that global and lasting peace can only be achieved if it is based on social justice, thus leading the industrialised nations to the creation of an international Labor Organisation in order to Integrate this concept of justice in the context of the exploitation of workers. Apart from safety and humanitarian considerations, political and economic criteria have been assessed, as economic interdependence and the need for cooperation in achieving similarity of working conditions in the countries competing in the common market they were becoming more eccentric.

### 4.2 International Labor Organization (ILO)

The International Labor Organization (ILO) is an intergovernmental organization based in Geneva and founded on 11 April 1919 and joins governments and workers from 187 member States. The founding of this international organization was in fact the result of long and persistent efforts by the international Society of the early 19th century, seeking to protect work through settlements, and to remove of injustice and deprivation of wages for workers. In anticipation of the need for close international cooperation with a common social policy, they considered this to be the most important claim for the various labor organizations, particularly in the industrialized countries, especially after the industrial revolution. The agency's work on shipping includes the promotion of a range of conditions regulating shipboard labor such as working hours, insurance, leave, sickness wages and minimum wages for seafarers. As the crew's payroll costs are a significant proportion of the operating costs of the shipping company. The work of the ILO significantly affects the operation of shipping companies. The representation of the member countries in the ILO is tripartite and includes representatives of each Government of the Member State and representatives of workers and employers. Key institutions of the ILO are the annual International Labor Conference, the Governing Council (elected by the Conference and consisting of 28 government representatives, 14 employee representatives and 14 employers ' representatives), and the International Labor Office Which is the ILO coordinating body.

### 4.2 Maritime Labor Convention (MLC 2006)

The 2006 Maritime Labor Convention (MLC, 2006) was adopted on 23 February 2006 at the 10<sup>th</sup> maritime and 94<sup>th</sup> session of the ILO International Labor Conference (ILC). The Convention contains over 100 pages of comprehensive code specifying rights and responsibilities, as well as technical minimum standards for the working and living conditions of seafarers working on commercial ships including yachts. The Convention entered into force on August 20, 2013, 12 months after ratification of the minimum requirement, namely the 30 ILO Member States representing at least 33% of world capacity. Until today, 84 countries represent over 90% of world capacity has ratified the Convention The MLC aims not only to ensure comprehensive worldwide protection of the rights of seafarers but also to establish a level playing field

for countries and shipowners committed to providing decent working and living conditions for seafarers, protecting them from unfair competition on the part of substandard ships

#### 4.2.1 Structure of the Convention

The Convention in principle comprises 16 Articles concerning provisions on the legal and procedural aspects of the implementation and interpretation of the Convention, such as definitions, provisions on ratification, entry into force, formulation of general principles, obligations and rights which are set out in detail below. It is then divided into 5 Titles, areas of interest that include both binding principles and obligations as well as non-mandatory guidelines, namely the following two parts:

- Part A. Standards, which are mandatory, and
- Part B. Guidelines, which are not mandatory, but should be duly taken into account by governments in the process of implementing the Convention.

#### 4.2.2 Provided Protection

The success of this new Convention is based both on the goals it pursues and on the process of implementing them. Its trilateral creation, recognized by shipowners and seafarers' representatives and with strong involvement by Governments, makes its provisions acceptable to all, thereby committing governments and shipowners to ensure decent working conditions for seafarers.

The Convention establishes the following rights:

1. Every seafarer has the right to a safe workplace that complies with safety standards.
2. Every seafarer shall have the right to fair conditions of employment.
3. Every seafarer shall have the right to dignified working and living conditions on board.
4. Every seafarer shall have the right to health protection, medical care, welfare measures and other forms of social protection.
5. Each Member shall, within the limits of its jurisdiction, ensure that the employment and social rights of seafarers referred to in the preceding paragraphs of this Article are fully implemented in accordance with the requirements of this Convention. Unless otherwise specified in the Convention, such implementation may be achieved through national laws or regulations, through collective bargaining agreements or through other measures or in practice.

However, in addition to social and labor rights, it guarantees fair competition for economic operators on a level playing field for ship-owners. The Convention leads to a level playing field through a certification system, providing clear incentives for ratification by ship-owners. On the one hand, their ships will benefit from a certificate enabling them to avoid delays caused by detailed port State inspections, and on the other hand they will also have a specific protection against unfair competition from non-compliant ships, due to the lack of standards due to the principle of the prohibition of favourable treatment, which is incorporated in to the Convention.

Because of this principle, it will be in their interest to comply in order to benefit from the certification system.

Through this principle, the legal obligations under the Convention, while in principle only applicable to seafarers on ships flying the flag of the Member States, may require the authorities of the countries which have ratified the Convention to visit ships at their ports. In this respect many of the Convention's standards, regardless of whether the flag country is bound by the Convention. The principle of prohibition of favorable treatment embodied in the Convention. Because of this principle compliance will be in their interest in order to benefit from the certification system.

The concept of 'fair play' refers to the idea of fair competition in the sense that each player in the particular trade operates under the same basic rules or conditions. In the maritime sector, increasing regulations on environmental protection and safety and the resulting costs leave room for lower operating costs by reducing labor costs. Thus, those who provide decent working conditions are disadvantaged compared to those who are not obliged to do so and can therefore be considered to compete unfairly. The Convention, through the principle of "no more favourable treatment", addresses the unfair competition arising from shipowners and flag states which allow for poor or degraded conditions. This view of justice is of particular importance in developing economies because of the increased competitiveness of workers based in these countries in relation to the more 'expensive' workers in developed economies.<sup>15</sup>

For the majority of claims arising out of the MLC the responsibility lies with the shipowner as defined in the Contract: "shipowner means the owner of the ship or another organization or person, such as the manager, agent or bareboat charterer, who has assumed the responsibility for the operation of the ship from the owner and who, on assuming such responsibility, has agreed to take over the duties and responsibilities imposed on shipowners in accordance with this Convention, regardless of whether any other organization or persons fulfil certain of the duties or responsibilities on behalf of the shipowner."

Below are listed the Convention's areas of interest and regulations 5 titles and in particular:

#### Title 1. Minimum requirements for seafarers to work on a ship

1. Minimum age , in order to ensure that no-under age persons work on board a ship
2. Medical certificate, so to ensure that all seafarers are medically fit to work on board a ship
3. Training and qualifications, so to ensure that they are qualified to carry out their duties
4. Recruitment and placement, ensuring that seafarers have access to an efficient and well-regulated recruitment and placement system

#### Title 2. Seafarer's employment agreement

1. Contract of Employment, all seafarers shall have fair employment agreement
2. Wages (without setting minimum wage), to ensure that they are paid for their work

3. Hours of work and hours of rest, so to ensure that they have regulated hours of work and rest
4. Entitlement to leave, all seafarers shall have adequate leave
5. Repatriation, to ensure that all seafarers can return to their home country
6. Seafarer's compensation for the ship's loss or foundering, so the seafarers are compensated if the ship is lost or foundered
7. Manning levels, to ensure that on board personnel is sufficient for the safe, efficient and secure operation of the ship
8. Career and skill development and opportunities for seafarers' employment, to ensure the promotion of their career and development of their skills

#### Title 3. Accommodation, recreational facilities, food and catering

1. Accommodation and recreational facilities, to ensure that the facilities on board are adequate
2. Food and catering, so to ensure that seafarers have access to good quality food and water

#### Title 4. Health protection, medical care, welfare and social security protection

1. Medical care on board and ashore, in order to protect the health of seafarers while on board
2. Shipowners' liability, to ensure that seafarers are protected from the financial consequences of sickness, injury or death occurring in connection with their employment
3. Health and safety protection, Accident prevention, so all seafarers to work in health and safety environment while on board
4. Access to shore based welfare facilities, in order to ensure that they have access to shore-based facilities and services to secure their health and well-being
5. Social security, all seafarers shall have social security protection

#### Title 5: Compliance and enforcement

1. Flag State responsibilities, each Member implements its responsibilities with respect to the flag of the ship
2. Port State responsibilities, enabling each Member to fulfill his or her responsibilities under this Convention with regard to international cooperation in implementing and enforcing the standards of the Convention on foreign ships
3. Labor-supplying responsibilities, to ensure that each Member carries out its obligations under this Convention with regard to recruitment and placement of seafarers and the social protection of its seafarers

#### 4.2.3 Enforcement and compliance

The Convention provides a multi-level system for effective enforcement and compliance.

1. For flag Member States:

The Convention stipulates that each Member shall be responsible for carrying out its obligations thereby establishing an acceptable effective inspection and certification system ensuring the working and living conditions of seafarers. In particular they will issue a Maritime Labor Certificate and a Maritime Labor Compliance Declaration that will prove prima facie that the ship has been duly audited regarding working and living conditions.

2. For Member States as Port Authorities

The purpose of the arrangements shall be to enable each Member State to apply the Convention's standards to foreign ships. Any foreign ship calling at a member's port may be subject to an inspection in accordance with the requirements of this Convention (including seafarers' rights) regarding the work and living conditions of seafarers on board. In addition, each Member shall ensure that seafarers on ships calling in its port claiming breach of this Convention have the right to complain.

In addition, it is envisaged that seafarers will be compensated in accordance with national laws for any loss or damage suffered as a result of the improper exercise of their powers of inspection, thus enabling the plaintiffs to take immediate action against the inspectors.

#### 4.2.4 Challenges to legal implementation by flag states

The challenges associated with legal implementation are perhaps the most significant and largely justify the slow pace of ratification of the Convention. That's because it's both a labor contract and a maritime contract. As a labor contract, like others of the ILO, it is usually the subject of the competent authorities / ministry for labor in each country, but as a maritime contract the port authorities will also be responsible for control. An integrated approach is therefore needed to achieve its implementation.

Especially issues such as social security, safety and health and the implementation of arrangements through collective bargaining agreement will not fall within the normal practice or jurisdiction of most port authorities. In addition, another difficulty encountered by some flag States relates to the national flexibility that requires negotiation between seafarers and shipowners. However, some countries either did not have the respective organizations or, if they existed, were not allowed to represent seafarers or shipowners.

Another major difficulty for some countries, especially for the least developed, has been the problem of legal drafting for its implementation.<sup>17</sup>

## **CHAPTER 5: ANALYSIS OF THE DUTIES FOR ALL CREW MEMBERS**

### **Introduction**

All ships shall have adequate number of seafarers on board according to the minimum safe manning Certificate of each vessel. Every crew Member perform essential duties in many different areas within the vessel. The crew members are separated in two categories, the deck and the engine. Below is analyzed a typical crew list including all officers and ranks and the duties they perform.

#### **5.1 MASTER (MSTR)**

He is the captain of the ship and the Supreme Deck officer. Some of his duties includes the overall, responsibility for the safety of the crew, ship and cargo and the command of the ship. He must be on the bridge upon arrival and departure from ports, in shallow waters, during reduced visibility, during any malfunctions, when other navigational officers are unable to handle the ship during the duration of the heavy traffic and during an emergency or abnormal condition. Master is the one who applies law and order on board.

The Master ensures that the evaluation reports are submitted in accordance with the instructions in order to inform the company about the needs of the ship. He still undertakes the familiarization of seafarers with respect to any additional training as required by the company.

He is responsible for the training of the crew and carry out exercises. Master also serves as a contact person for communication with the office and checks that all crew members possess the appropriate STCW licenses, visas according to their ranking before they take up their duties.

He must be certain that the original Contract of Employment, which clearly defines all the terms and conditions required under the normal terms of employment of the company, is present on board the ship.

The Master is responsible for ensuring that the ship is manned in accordance with national and international regulations as well as the requirements of the flag State. He must check that the seafarers have with them on boarding the originals or certified copies of certificates and certificates approved, as appropriate, together with the necessary relevant flag endorsement or proof of application or equivalent document. Lastly, he shall ensure that if any of the above requirements are not met when a new sailor boards the ship, he must not sign for this seafarer and must report it immediately to the office.

#### **5.2 CHIEF OFFICER/CHIEF MATE (CO/CM)**

He is the Head of the deck department. Watchstander, in charge of the ship's cargo and deck crew. GMDSS Communication Officer. His tasks and responsibilities are the preparation of cargo loading and unloading plans and the evaluation of Deck, Bosun, Pup Man, ABs, OSs, Chief Cook. It gives them their daily work schedule. Normally he is the head of security of the vessel, although he may transfer his duties on security to the 3rd. His responsibilities also includes the maintenance of the deck and general repair of deck machines and the mooring of the vessel at anchorage. If any emergency situation occurs, he is the head to the deck indicating to



the Captain as appropriate. He is also responsible for the implementation of repair lists and handling of docking situations.

### **5.3 SECOND OFFICER/SECOND MATE (2O/2M)**

Third in command GMDSS communication Officer and a watchkeeping officer, customarily the ship's navigator. Some of his tasks and responsibilities are the transit planning, selecting graphs, designing courses and calculating distances. He is responsible for correcting diagrams, sailing directions, the list of light and fog signals, radio signals and updating navigation warnings. The second officer prepares the deck log summary at the end of each month and assists Chief Mate in the port when loading and unloading the cargo.

### **5.4 THIRD OFFICER/THIRD MATE (3O/3M)**

He is the watchstander and customarily the ship's safety officer. His responsibilities include the maintenance of rescue equipment and firefighting equipment in accordance with the Instructions from the security officer, the preparation of exercise reports, the handling of Port documents on behalf of captain and the handling docking station

### **5.5 CHIEF ENGINEER (CE)**

He's generally responsible for engineering and he is the Supreme Officer on the machine. His duties include the full responsibility for the operation of the machinery and for any maintenance of machines on board. He works closely with the captain, who at times holds the same class, to ensure that the physical appearance of the ship is completely under control. Maintains inventory for spare parts, extra fuel and oils. This list should be updated whenever necessary. Ensures that the engine room is well maintained and prepared for inspection by the higher authorities. He must also determine the amount of oil, fuel and lubricant required for each journey and make sure that there are significant quantities of each of them. He is responsible for the correct repair and maintenance of the ship so that it is in a state of readiness at all times. Keeping tanks in good condition for waste management, treatment and testing program. Monitors and maintains systems following preventive maintenance program on a daily, weekly and monthly basis with the support of the lower engineer. Participates actively in the repair and maintenance periods of the shipyards. Follows the policies and procedures for the safety and prevention of Pollution of the company and will ask for supervisory assistance/guidance when necessary. Carry out periodic inspections to ensure that the crew complies with the regulations concerning the operation of the vessel.

## **5.6 SECOND ENGINEER (2E)**

The second engineer supervises the daily maintenance and operation of the engine department. With further experience or examinations will become a first engineer. He is the assistant to the original engineer and usually performs most of the work on behalf of the engineer and makes repair lists. He is responsible for all kinds of machinery: steering gears, pumps, auxiliary machinery and main maintenance of the engine. He is also responsible for the engine room and all the scores of its subordinates, namely Fitters, Oilers, and Wipers giving them daily work schedule.

## **5.7 THIRD ENGINEER (3E)**

The third engineer has a class III certificate. With further experience or examinations he will become a second engineer. His tasks includes the operation and maintenance of generators, the operation and maintenance of boilers and the operation and maintenance of the propulsion engine cylinder head bases. He is also conducting water cooling tests.

## **5.8 FOURTH ENGINEER (4E)**

The fourth engineer has a class III certificate. With further experience he will become a third engineer. His duties are to take bunkers and assist Chief Engineer in fuel calculations as well as the operation and maintenance of the sewage treatment plant (sewage plant), the incinerator (incinerator), the water separator (oily water separator), the freshwater generator (fresh water generator) and the air compressor.

## **5.9 ELECTRICIAN (ELE)**

He works under the 1st engineer. Performs various tasks related to electricity, from changing the lamps to generator repairs. Electricians start as electrical cadets.

## **5.10 BOSUN/BOATWAIN (BSN)**

He is the seniormost rate of the deck department, responsible for the components of the ships' hull. He must bring any problem associated with the crew to the Chief Mate. Some of his duties are the wire coupling, color mixing, cleaning, aiding the Chief Mate during the mooring and supervising the ratings on the deck

## **5.11 ABLE SEAMAN (AB)**

The AB is doing maintenance work on the deck such as painting, washing, cleaning and lubrication equipment. Will help watch keeping with experience and can become Bosun,

## **5.12 ORDINARY SEAMAN (OS)**

An OS performs maintenance work on the deck such as dyeing, washing, cleaning and lubrication. The difference between OS and AB is that the ordinary sailor will not help in the

direction of the ship and will not help Bridge watch. But with experience, and proper monitoring certification, the normal sailor can become AB.

### **5.13 OILER (OLR)**

The Oiler performs maintenance work in the engine room. Helps engineers with repairing machines, cleaning and painting. This ranking is equal to AB. Sometimes with experience it can become a Pumpman

### **5.14 PUMPMAN (PMM)**

The Pumpman belongs only to the tanker ships. This class is equal to Bosun, but most of the time works independently and takes orders directly from Chief Mate. He plays an important role during loading and unloading, mainly by opening valves according to the instructions of the Chief Mate.

### **5.15 FITTER (FTR)**

Responsible for the daily maintenance and minor repairs of all mechanical equipment on board

### **5.16 WIPER (FTR)**

He is the most junior rate. Cleans the engine spaces and machinery and assists the engineers.

### **5.17 CHIEF COOK (CKK)**

The chief cook prepares meals for all the staff on board. It is a critical job especially on a ship with a multinational crew, because each person will worship different foods and different cooking styles. The food should be ready on time and match the national style of the crew and especially the captain and the senior officers. Chief Cook should be able to write English and know different menus and names of food items. His ranking is equal to Bosun.

### **5.18 MESSMAN (MSM)**

Helps chief cook in his cooking work. Cleans all the places the seats, the cabins of senior officers, various kitchen utensils and cookware. Serves food to all staff and guests onboard.

## **CHAPTER 6: CREW DEPARTMENT: ROLES AND RESPONSIBILITIES**

### **6.1 Introduction**

The crew department of the shipping company is an important section for the proper staffing of the ships. Crew Manager usually is a master of the Merchant Navy who may have previously worked on company ships. The department's mission is to find/replace crews for the newly-established or already existing ships of a shipping company.

Employees who work in a crew department shall have strong problem-solving skills, the ability to work efficiently under high pressure and short timeframes and maintain the minimum requirements set by the security management system. Important role plays the ability to safeguard the interests of the company while maintaining excellent relations with all third parties involved in the smooth supply of crew to ships. Strong interpersonal and intercultural communication skills. Of course, employees of this department should be flexible to work out of office hours and travel abroad when required.

### **6.2 The roles and responsibilities of the Crew department according to STCW, ISM and MLC**

The purpose of the Crew Department is to ensure that all ships managed by the company are adequately manned with suitably qualified, skilled and medically suitable seafarers to cover all aspects of maintaining safe Inspections on board the ship in accordance with the IMO, STCW, ISM Code, MLC 2006 including compliance with other local and international regulations.

The Crew Department in general is responsible for ensuring that the policies and procedures for manning of the company are applied and the company's ships have adequate levels of suitably qualified, skilled, competent and medically adapted seafarers available for ships in accordance with the requirements of IMO, STCW, ISM Code, MLC 2006 and Company. The control of appropriate qualifications, competent and medically appropriate seafarers and certification requirements by the flag administration, such as the Seafarers Licence, the approval of COC and certification, as well as and any additional requirements in the IMO code, STCW, ISM Code, MLC 2006 and Company. Important role plays the negotiation with trade unions and federations of work as appropriate as well as the budgets associated with the crew are adequately defined and monitored. Crew department is responsible for the regular benchmarking and proposals for wage adjustment or the structure of seafarers based on the current market situation.

The Determination of the number of seafarers to be used, the interviews and required evaluation and training is within Crew department's responsibilities. The evaluation reports of seafarers to be completed in time and forwarded to the Executive Director or senior executives of the administration, the payment of crew salaries and distributions by Crewing agents to be executed promptly. Employees of the crew department are responsible for the budget inputs related to the crew are adequately defined and monitored between managed ships and the control and evaluation of crew agents.

The direct responsibilities of the companies arise mainly from Regulation I / 14, VI / 1 and VIII / 1: training, certification, record keeping, updating, special ship familiarization, crew coordination, communication, basic safety training, basic familiarity with safety for all seafarers and identifying who is responsible.

Regulation I / 14 includes the express new responsibilities of companies: As these provisions were recently added to the STCW Convention, they entered into force on 1 February 1997.

The functions of companies are generally set out in Annex 1, Chapter I, Reg. I / 14 and AI / 14 and BI / 14 in the STCW code. Corresponding reference to the ISM Code is made in paragraphs 6, 7 and 8 of the ISM Code.

The provisions of Section A-I / 14.1 clearly require the company to apply audit procedures to ensure that the company's obligations arising out of STCW are fully implemented. In addition, it indicates the responsibility of the company to organize training programs and information procedures to provide a framework in which every crew member can know and realize the safe operation of the ship.

The obligation to take other necessary measures requires the company to determine vocational training needs and / or information gaps in order to know what measures may be needed. This requirement is closely linked to the existence of a safety management system as required by the ISM Code and it is therefore likely that the implementation and existence of such internal control procedures will be closely monitored as part of the ISM Code certification process.

Regulation VI / 1 of the STCW Convention stipulates that any crew member with safety or pollution prevention duties must have evidence of completion of basic safety training. This should in fact include proficiency in rescue boats, fire fighting and first aid.

Regulation VIII of the STCW Convention contains specific requirements regarding minimum rest periods for watchkeeping staff, as well as provisions to replace the timetables and general watchkeeping standards to be observed.

According to Regulation I / 14-1, it is clearly the responsibility of the company to ensure that all seafarers on board have appropriate certificates. It will therefore be extremely important to verify that the certificates, visas, evidence and, in short, all professional qualifications, are valid and authentic. This includes both certification and documentary evidence of safety familiarization and additional approved training courses.

According to Reg.I / 14-3, it is the responsibility of the company to keep the documents and certificates of all seafarers at its disposal. This includes all the documents summarized as evidence. In addition, medical records as well as any other training documentation and evidence of previous experience.

It is required by Reg.I / 2 par. 9 that all documents are available in the original form on board the vessel in which the legal holder serves. This includes the original of any training documentation or proof of competence, such as a training log book, etc. required by the Convention. Photocopies of certificates, visas or evidence of education etc. are not acceptable.

A key element to be held by an employee of this department is confidentiality and secrecy. All seafarers records must be retained by taking due account of the right to privacy and the need to protect confidentiality.

### 6.3 Manning agents

The crew department may be integrated into the shipping business itself, especially if the crews are of the same nationality but may have authorized crew management representatives in another country if, for example, the majority of the nationality belongs elsewhere. However, a reference is made to the ship-owning company for obvious reasons explained below (economic reasons, quality of service offerings, etc.).

The contracted crew representative or Manning agents are responsible for ensuring that adequate levels of appropriate qualifications, competent and medically appropriate seafarers and certification requirements from the flag administration are applied accordingly, such as Navy license, COC and certification approval and any additional data to STCW and MLC 2006 requirements. If the manning agent cannot satisfy any of the requirements of the flag, then the shipowner should be notified immediately. They must follow the company's standards and conditions of employment as defined in the company's statutes. It is also important to satisfy and satisfy the designated recruitment process by the shipowner. All new applicants are interviewed and if they succeed in further evaluation by managers, something that the ship-owning company does not require this additional coordination. It also takes time and extra labor hours to achieve this process. The tenders of all seafarers must be in accordance with the promotion criteria of the company and all the comments from the seafarers on the issues of trust must be treated promptly and monitored in consultation with the Head of the crew. In general, coordination with the crew section of the shipping company must be properly maintained and the Naval Assessment Report given and updated at the time of signing.

The Manning agents must inspire confidence that seafarers have access to an efficient, adequate and responsible system for finding employment on the company's ships without burdening the Navy. No remuneration or other charge for the recruitment or placement of seafarers or for the provision of employment to seafarers shall be applied directly or indirectly, in whole or in part, by the company and/or the management board. If any charges are to be applied during the recruitment process, then they must be made public clearly and the sailor must be informed in good time. Manning agents and their employees are prohibited from collecting any kind of supply from seafarers for the provision of recruitment and placement services. Any such activity will be treated in accordance with the disciplinary procedures of the company and will be reported to the authorities for further legal prosecution. Moreover, there is no reduction in the remuneration of the Navy for the acquisition or maintenance of employment. Trends in the exploitation of seafarers arising from the issue of accession to advances or any other financial transaction should be avoided. By disclosing these policies and business practices to all seafarers and office workers. Agents must prohibit any practice in which seafarers pay a deposit to cover the cost of repatriation at the start of their work. In addition, crew officers shall prohibit the recovery of costs repatriation by seafarers ' salaries or other rights, unless the seaman has been established, in accordance with national laws or regulations or other measures or in force agreements Collective bargaining, the employment obligations of the Navy. Thus, seafarers must be informed of any particular conditions applicable to the work for which they are to be recruited and the policies of the company regarding their employment. This update will take place during the pre-accession update. To ensure the above, Crewing Agents should have established the following procedures an up-to-date registry of all seafarers recruited or placed on board and made available for inspection. To do this, this platform should have a lot of information for sailors. It is also necessary to be able to record, update and manipulate the information. Today a computerized system has almost exclusively replaced a handwritten system. There may be some organizations that use paper systems, but they are rather small businesses and few. This computerized system should perform various tasks and be used on various occasions. It is therefore necessary to have various types of data from the system. Parts of the data are stable or unchanged, while others are constantly changing. In the category of fixed data are those such as family names at birth, date and place of birth, gender, nationality and names of parents. This data will not be changed in most cases. Other information remaining constant is the recording of the first training, including the schools were followed, the dates of attendance and the qualifications acquired, as well as the history of employment until Date of employment from the current manning service. All this information can and must be verified by observing the certificates and recording the relevant data, which usually takes place at the time of recruitment or the commencement of employment of Agent.

This information will form the basis of the personal files of the employer or agent. Changing data will be a record of facts and documents that change over time. They change either because, like documents, they have a finite period of validity and need either to be renewed periodically or to be informed at a higher level or are the activities that the employee pursues during the period of employment. This will be their employment card, including periods during which they travel to and from ships, sick leave, etc. Promotions, updates, temporary or permanent, should also be recorded. All this data changes over time and many of them are necessary for the payroll operation. Although payments during the journey are often calculated by the master, the details are sent to the agent for both recording purposes and for the payment of any outstanding balances when the sailor has left the ship and He's coming back to the docks. In conclusion to be fully useful, a system must also be able to produce reports on certain criteria data. (e.g. evaluation reports, payroll reports, warnings for renewal of certificates, etc.).

However, seafarers must be informed of their rights and duties in writing in the context of their employment contracts before or during and receive a copy of the agreements they have signed. In general for any complaint regarding the activities of the operators or the activities of the company should be examined and answered by the Central Office and be informed of any doubt (anonymously or not). Corresponding complaint form should be available.

### **Control procedure of the shipping company to the Manning agents**

The actual performance of Manning Agents and their ability to meet the company and other specific requirements are continuously evaluated through various parameters. First of all, the performance of seafarers employed by them as well as any complaints about their service. Important role plays the state of certification and/or authorisation. The results of the annual third-party audits carried out at their premises and the careful and correct selection of seafarers who are new to the company. Moreover, the proper and timely processing of seafarers ' documents plays important role and the conservation rates of seafarers with good performance. Last but not least, the proper training of seafarers in accordance with IMO regulations, MLC requirements and governmental regulations.

An important element of trust is also the control scheduling (audit) in manning agents at regular intervals. Below, one can point out these questions through the audit process in order to identify in time shortcomings and malfunctions of the office that offers its sailors. Issues such as these are relatively serious:

- Does the agency have a policy against discrimination in recruitment practices?
- Does the agency have any accreditation from any other organisation?
- Has the agency ever filed for bankruptcy?
- Does the agency have a political statement suggesting a commitment to customer needs?
- Does the agency have a Quality Management system (QMS)?
- Has the body obtained ISO certification?



- Has the agency clearly defined the quality objectives?
- Are these consistent with the Member States, quantifiable and measurable?
- Are the competences and principles clearly defined with the structure of the agency?
- Who is the representative of the Quality Management of the agency and to whom does he report?
- How is information transmitted to the Agency?
- Do the Member States of the agencies require regular management evaluations? If so, what is the space?
- What training do the members of the agency's staff receive? Are these training files retained?
- Are the internal auditors of the agencies appropriately qualified and appropriate
- does the Agency have a procedure to monitor and analyse customer feedback?
- What is the agency's system for dealing with customer complaints?
- Does the Agency have a procedure for closing the resolution of complaints?
- Is the entire process of handling and resolving customer complaints documented? -  
Improvements resulting from customer feedback are documented; Is this procedure official?

## **CHAPTER 7: SELECTION AND TRAINING PROCEDURE ON SHIPS**

### **7.1 Introduction**

Every ship has different demands and a level of difficulty for the seafarer. Each seaman must be aware of the conditions for the management of the specific ship he intends to work. So long as the seafarer chooses the ship and the company that will work, the first department that will come in contact is that of the crew department. Then the crew department starts the process of recruiting and selecting and training the seafarer. In this chapter we will analyze this process.

### **7.2 Recruitment and certification testing of the Seafarer**

A company can recruit a crew of various nationalities from all over the world and it is important to ensure effective communication between them and manning agent. For the aforementioned reason and if there must be correspondence between several members involved, the company must pay great attention to the good knowledge of the English language during the recruitment process, both on board and ashore. As the company requires all ashore personnel to communicate in English while in service the same happens to its seafarers. English certification is therefore a basic proof of recruitment. Another pre-requisite recruitment element is that no person under the minimum age of 18 years will be employed or recruited or employed on a ship operated by the company. A mandatory document to be given to the company is the CV of a seafarer in which the date of his availability and the duration of all previous contracts are indicated. Depending of course on the degree of each candidate, the experience and the reference of the ship type is important. Alternatively, the crew section can extract the full CV from the crew database system if it is a second time to the company, provided that all required information is already encoded at the time of proposal. A CV should also indicate domicile, passport number, marital status, age, etc. More specific should be mentioned some of the following: ' Engine type, cargo, trading area ' etc..

The adoption of recommendations by third-party companies referring to a CV is a common policy and should be observed in the spoken language. Following the approval of the selection of CVs, action should be taken in order to arrange an interview between the seafarer and the Crew Department. Usually the manager or employee of the technical Department (Technical Superintendent) conducts interviews for engineers and corresponding Master for candidates of the deck.

We must characterize the process of personal contact as being particularly important because the human factor is the most difficult and uncontrolled cause of accidents. It is a fact that 75-96% of maritime accidents are attributed, at least in part, to some form of human error. Errors were observed due to lack of a decision, activity or passivity. Perhaps a decision that is not in line with reality, which inadvertently causes an incident, an accident, was taken. We may also have perception errors, intent errors, execution errors, and planning or maintenance errors. Many have also been created due to stress. Stress is an individual reaction, some sailors are more susceptible to it than others, have overflow of emotions and can lead to excessive activity, tillage, apathy, irrational behavior, uncontrollable bodily movements and Even loss of consciousness. Of course stress is fertile when in a typical emergency situation the solution quickly unfolds, it is treated in

a short time etc. However, negative stress creates a gradual increase in the level of pressure when one predicts an inevitable situation, estimated as critical or difficult to plot and with probability of accident or professional failure. Many times senior officers stress the rest of the crew because of his great authoritarian leadership and unpredictable behavior, which makes him an inadequate officer.

Some of the frequently asked questions of an interview so as to identify the above and minimize the probability of error are as follow:

- What do you like most about being a sailor?
- If you saw a sailor doing something unsafe or anti-environmental on board what would you do?
- How well can you respond during an inspection even when you may not agree with their decision?

Tell me about your previous employment. How have these past experiences helped you prepare for a career at sea?

- Since when did you want to become a sailor?
- How do you handle the job with a friend of yours Navy?
- Do you have a medical history on board?
- How many years of service do you have on deck/engine?
- If you are hired what steps would you follow to understand the functions of our ship before the contract date?
- Have you ever had to get off the ship for long periods of time? How do you keep yourself very awake and intense?
- Are you fully trained in the use of lifeboats?
- Are you trained in First Aid and CPR?
- How strong is your sense of direction?
- Tell me about your participation in group exercises
- Tell me about a time when you had to work with someone who was hard to comprehend as a human being.
- Tell me about a time when you worked on a collective slavery on board based group, where a member did not do his share in this project.
- Discuss an important decision you made in your last role and the impact this decision had, if any.

- Tell me about a time when you have received criticism from your superior. How did you react to this review? How did you improve based on this review?
- Soon describe to me your work history. Please indicate the reasons why you have left the previous shipping company.
- What is the worst weather condition you have encountered?
- How would you operate in a state of emergency, do you have a similar incident in your tenure?

As long as the interview is successfully completed, the seafarer must also bring his/her documentation, including all diplomas within it. In general, all certificates of competency, visas and any documentary evidence of the Navy required by STCW should be checked. This is a particularly important process as we must demonstrate that the level of maritime education and training, the duration of the service at sea, professional competence, medical suitability and your age conform to the standards of STCW. A document must be issued either as part of the certificate or as a separate document confirming that the National certificate has been issued in accordance with all the requirements of the STCW. However, due to the continuing problem with counterfeit certificates, the amended STCW convention of 2010 made substantial changes to regulation I/2 to tighten up the ratification process. Now all visas are required to be issued only from the main issuing source after full verification of the authenticity of any certificates and evidence and that the candidate has met all the requirements and has the standard Capacity specified in the validation. There is also a requirement to ensure that the respective service and training are properly approved and that the relevant maritime service is maintained. In accordance with the amended Regulation 2010 of the STCW I/2 convention, all seafarers serving on foreign ships must be approved. To obtain recognition approval, you must submit the original of your national Certificate of competency to the representative of the issuing administration. You cannot apply for approval based on another validation. Administrations will also require proof of identity. In most cases you will have to pay. The employer (owner or Crew manager) will normally take care of all necessary paperwork and fees. The way documents are submitted varies from management to management, especially in accordance with the revised requirements and while some may still accept a postal application and copies of documents, they are more likely to insist that the sailor appears in person with all original documentation. These personal requests are processed before a representative of the administration at a certain office (if abroad this is usually done at the consulate of the country's administration). To make sure that the certificate is genuine, documents you submit to a foreign administration will be authenticated as to authenticity, and the new requirement to maintain a database can help in this process. A visual check is included in order to verify the security features in the certificate. Its number and data can also be cross with the issuing administration. This process may take time, so the administration will issue a letter stating that your application is being processed. By making this letter you are able to serve on board for a maximum period of three months.

### 7.3 Procedure and standards of medical certification

Medical certification is mandatory for all seafarers working on board ships. Every time a sailor is about to join a ship, a new medical examination must be carried out. The company requires that before the commencement of work on a ship, seafarers are holders of a valid medical certificate confirming that for the entire duration of their contract they are medically capable of performing the duties they must perform at sea. The medical certification must conform to ILO MLC 2006 and the company standards. Medical certification shall be carried out by a suitably qualified doctor in the case of a certificate relating to vision only, by a person recognised by the competent authority as competent to issue such a certificate. Each medical certificate shall indicate in particular the hearing or sight (color vision) of the interested Navy. The seaman concerned is checked that he is not suffering from a medical condition that may deteriorate due to service at sea or make the navy unfit for such service or endanger the health of other passengers. Medical certificates are valid as listed in the issued certificate, but are in no way valid more than a maximum period of two years and a maximum period of six years. Where a seaman has refused to obtain a certificate or a restriction on his ability to work, in particular in relation to time, work or place of trade, the possibility of further examination should be given by another Independent medical practitioner. In the unlikely event that the period of validity of a certificate expires during a voyage, the certificate shall continue to be valid until the next port of departure in which the seaman receives a medical certificate from a qualified physician, Provided that the period does not exceed three months. Finally all medical certificates must be provided at least in English. Certificate identification (endorsement) from a corresponding ship flag and authenticity thereof should also exist. The company will require all officers and the rest of the crew to undergo drug and alcohol tests before the contract starts. Crews and officers participating in the same ship must be checked every 6 months before entering the vessel. The examination of alcohol and drugs during the preliminary procedure will be carried out with a blood test presenting hepatic function or urinalysis. The abnormal results will be reported to the company and further surveys may be proposed. Refusing to submit to tests for drugs and alcohol will lead to an unhired person. At the master's discretion, officers and scores may be tested for alcohol before initiating any critical actions on board, whenever there is suspicion of alcohol use before such actions or whenever it considers it Necessary. Proper information training on drugs and alcohol is part of compulsory education according to the requirements of the flag

#### 7.3.1 PEME

In recent years companies have faced numerous claims that arose from diseases of the Filipino seamen due to medical conditions that pre-existed while on board, but were not detected by regular medical examination prior to Recruitment (PEME). These claims include the cost of repatriation, medical care, compensation and sickness wages. In most cases the amounts were bulky and affect the situation of the others aboard the ship. The primary objective of P&I CLUB's PEME program is to protect shipowners from claims arising from the medical conditions that existed before employment and to provide the crew with a thorough

health check before going on board. So one should carefully review the list of examinations with the departments of their staff and the agents for each country from which seafarers are employed. Administrators should also regularly check the validity of PEMEs with clinics on behalf of members and must be ensured (either directly or through the manning agent) that the seaman must have valid Peme (in force).

The American Club for example requires seafarers coming from Bulgaria, India, Indonesia, Latvia, the Philippines, Poland, Romania, the Russian Federation and Ukraine to comply with the requirements of the Club program PEME. E.g. the American Club medical form should be completed, signed and dated. All required tests must be completed according to the Club PEME guidelines, members cannot select tests and the clinics will not issue Club PEME forms unless all required tests are completed. The American Club PEME will be valid for two years in accordance with regulation 1.2 (medical certificate), standard A 1.2, paragraph 7 (a) of the Maritime Labour Convention of 2006.

There have been some changes in the examinations and so members must carefully check these amendments. More generally, members should remain vigilant with manning agents to ensure that they are carried out on the basis of new changes. The following parameters should be used as guidance for examining a navy or other personnel on board as medically "fit for duty".

There are differences in acceptance standards that depend on many different factors, but these are the standards that the American club so as to be considered the sailor as fit for duty:

1. Medical history questionnaire. It is requested to make sure that the medical history questionnaire has been completed and, in particular, the statement upon completion of completing this form. The statement is important if there is a future claim that may be related to a pre-existing situation that may not have been reported.
2. Physical examination. A basic physical examination should include, at least, measurements of height, weight and blood pressure.
3. Dental examination. Visual examination for the identification of teeth with problems (warped, cavity, removal, etc.) and documentation of these abnormalities. If there are toothpastes or oral conditions that could potentially worsen and need attention dental during the Marine Maritime Convention, they should be corrected before they are considered "suitable for duty".
4. Psychological. In some jurisdictions, a sailor may also provide a military ticket or certificate proving that they were not committed to a psychiatric hospital or facility.
5. Visual Controls. The on deck officers of watch should have, at least, 20/20 vision.
6. Color vision. Those responsible with watchkeeping duties should give the guarantee that there are no problems of color differentiation in red and green color. For staff who are not concerned with prison keeping, you are considering where appropriate.
7. Audiometry. Standard hearing test and test "Whisper Test ". The Whisper test takes place 3-6 meters (10 to 20 feet) away from the applicant to determine if they can hear remotely. For deck staff, the minimum distance for the Whisper test is 3 meters (10 feet). For the engineering staff,

the minimum distance for the Whisper test is 3.5 meters (11.5 feet). As far as the use of hearing aids is concerned, it is recommended that seafarers be evaluated as appropriate, depending on the operation of the naval job and any restrictions on the flag of the State, if any.

8. X-Ray chest. Annual Chest X-ray (i.e. once a year) to check for any identifiable abnormalities.

9. electrocardiogram (ECG or EKG)

10. Urinary Examinations. If Hematuria (blood in the urine) is observed, an ultrasound must be performed and may indicate a potential problem (e.g. hypertension, kidney problems or diabetes).

11. Waxing (required only for food service or food handling staff). It is not obligatory for the normal ship crew, but mandatory for the staff of the food service.

12. Full blood analysis. The tests should be done for cholesterol, thrombocytocytes, platelet count, white blood cells, etc.

13. Ultrasound examination. An ultrasound examination should conduct a general assessment of the abdomen and pelvis with particular attention to the detection of gallstones and kidneys.

14. Hep Antigen B. If the test is positive, then the further profile should be taken into account according to the Navy's report. If candidates are positive for HBsAg, further testing should be considered.

15. Antibodies to Hep C. The anti-HCV (antibody detection test against hepatitis C) should be performed. The cut is positive or negative.

16. HIV Test. The American group has demanded tests for AIDS virus, but there are countries where these tests are either illegal or should be conducted with the consent of the Navy. The relevant laws and regulations of each nation should be taken into account on how and whether the test should be conducted.

17. Pressure control through the stress test. Tests should be carried out under two conditions if the seaman is under 40 years of age or older

19. Diabetes. A sailor can be considered "fit for service" with restrictions where appropriate for those who take only oral medication.

20. Laboratory blood in an overnight fasting condition. Candidates are recommended to report to the clinic an overnight fasting condition of 12 to 14 hours after dinner. Candidates must be informed to avoid drinking beverages such as milk, tea, coffee, carbonated beverages or juices.

21. Liver function tests.

22. Alcohol/Drug testing. Tests for cannabis, cocaine, barbiturates and amphetamines should be examined at least.

24. Spirometry

25. Blood pressure. Blood pressure is measured between 110/60 to the maximum of 140/90.  
Cocaine, barbiturates and amphetamines

Finally, it is important to emphasize that members are burdened with all other operating costs related to the mission of the Navy to the clinic, including the salaries of the occupants, the pay of the POEA, the transport costs etc. These are costs that should have arisen anyway. So, when these basic and main conditions are checked, our sailor is ready to ascend to the ship we have chosen him for.

#### 7.4 Seafarer’s training process based on the company's system

As we have already mentioned, compulsory education (statutory/mandatory training) including flags and governmental requirements must be completed before the signing of a navy contract. Without them, the sailor is forbidden to take up duties. It is important to emphasize that the training center which will undertake the training in the following must be contracted and certified in order to offer such services. A regular list of the necessary certificates that a navy will have to support its specialty and be considered as a candidate for manning the ship is found in table below per specialty:

	STCW '78, as AMENDED	MASTER	CH OFFICER	2nd OFFICER	3rd OFFICER	DECK CADET	CH ENGINEER	1AE	2AE	3AE	ELECTRICIAN	ELEC CADET	ENG CADET	FITTER	BOSUN	AB	OS	OILER	WIPER	CH/CK STEW	ASST COOK	MESSMAN
<b>STATUTORY CERTIFICATION (DOCUMENTS)</b>																						
National Certificate of Competency [COC]	National	S	S	S	S		S	S	S	S	S			S	S	S	S	S	S	S	S	
General Operators Certificate (GOC)		S	S	S	S																	
National and Flag State Medical Fitness Certificate		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Flag State Endorsement		S	S	S	S		S	S	S	S					S	S	S	S	S	S	S	S
Flag State Special Qualifications		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<b>*STATUTORY TRAINING</b>																						
Advanced Fire Fighting (AFF)	Reg VI/3	S	S	S	S		S	S	S	S												
Basic Safety Training* (BST)	Reg VI/1	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Bridge Team Management (BTM)	Reg II/1, Reg	S	S	S	S																	
Bridge Resource Management (BRM)	Reg II/1, Reg	S	S	S	S																	
Engine Resource Management (ERM)	Reg III/1, Reg						S	S	S	S												
Electronic Chart Display & Information System (ECDIS)	Reg II/1, Reg	S	S	S	S																	
Medical Care (MC)	Reg VI/4-2	S	S	S																		
Medical Emergency First Aid (MEFA)	Reg VI/4-1	S	S	S	S		S	S	S	S												
Proficiency in Fast Rescue Boat (PFRB)	Reg VI/2-2	S	S	S	S																	
Proficiency in Survival Craft and Rescue Boat (PSCRB)	Reg VI/2-1	S	S	S	S		S	S	S	S					S	S		S				
Shipboard Security Awareness Course (SSA)	Reg VI/6		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Proficiency in Designated Security Duties	Reg VI/6		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Ship Security Officer Course (SSO)	Reg VI/5	S	S																			
Specific type Electronic Chart Display & Information System (ECDIS)	Reg II/1, Reg II/2	S	S	S	S																	

Training Matrix - statutory



Complementary the company according to the flag of the ship, its voyages, the type of ship establishes mandatory additional training of its seafarers in order to be appropriately trained according to the current needs of the market and the Requirements of shippers.

### 7.5 Travelling procedure

So when we perfect all of the above and assume that the seafarer is qualified, has the necessary skills and is in possession of the correct documentation and visas, it is necessary to give him an update prior his departure. This should be carried out by the Crew Manager or Crew operator and may be considered an initial part of the familiarization process, which is also defined for all seafarers under the STCW. The briefing will cover the ship's schedule, date of departure of the seafarer, contact details of both the local agent of the ship and the travel agent in case of delay of travel or emergency, special detail of the ship, including the scheduled itinerary and any unusual requirements e.g. repair as well as the time of delivery of the receipt of duties on board.

The first and most important travel document is the passport. This is issued by the Government of the country of nationality of seafarers and is usually valid for up to ten years. However, like the passport, many countries require guests to have a valid visa. Some countries, such as the United States, also require special visas for seafarers to allow them to pass through the United States when entering or exiting a ship. Since many vessels can visit the US and many flights entail a change of flight in the U.S., some companies make it mandatory for all seafarers to have a valid C1 and D visa at any time, even if the vessels they serve not trade with the United States. It was once possible for sailors to travel with their ID cards, but this is no longer the case. Same applies to the European Countries as well, but the visa issued for transiting through those countries is called Schengen visa. However, it is important for seafarers to bring their identity and seaman books with them. They serve the purpose of proving that the bearer is actually a seaman.

In addition to the medical certificate the seafarer must carry and certificate of Vaccination. Seafarers must have undergone certain vaccinations, including cholera and yellow fever. It is important that the agent will have ensured that all seafarers have the correct vaccinations, as some countries are very particular about this issue and an inspection by the port State could lead to fines if it is found that certain crew members do not have the required vaccinations. It should also be noted that, as well as the necessary vaccinations, all sailors travelling to an area where malaria may be widespread should also be issued with a number of appropriate anti-malaria drugs. All seafarers must carry a valid international vaccination certificate in which the vaccinations are recorded.

The seaman will also bring with him the signed employment contract (contract of employment COE or seafarers employment Agreement SEA). In this agreement the company ensures that the conditions for employment on board are in conformity with the standards MLC 2006 for all seafarers working. The employment agreements of seafarers incorporate in all cases the relevant laws and regulations relating to flag administration, national laws and regulations, applicable collective agreements and the requirements of the Convention. 'SEA' includes at least the data listed in the MLC standard e.g. seafarers are entitled to adequate compensation in case of injury,

loss or unemployment resulting from the loss of the ship etc. This right will be incorporated in the relevant SEA according to the standard MLC 2006. The employment contract of seafarers is signed by both the seafarer and the company or a representative of the company (in case there is manning agent). The employment agreements of seafarers are agreed under conditions that ensure that the sailor has the opportunity to review and seek advice on the terms and conditions of the agreement and to freely accept them before signing, as well as other necessary facilities to ensure that they have freely concluded agreement with an adequate understanding of their rights and responsibilities. During this process, the sailor will also be informed of any particular conditions applicable to the work for which he is to be recruited and the specific policies of the company related to their employment. Signed prototype of the Seafarers Employment contract (SEA) shall be kept by the seafarer, a copy shall be transmitted to the ship (in order to be accessible for inspection by officials of a competent authority) and a copy shall be kept by the company. The employment agreement of seafarers and any applicable collective agreement shall be in English. In cases where the company wishes to extend the service of a seafarer (with the consent of the seafarer) or to promote the seafarer in a promotion then a new seafarer's employment contract may be signed. However, this agreement must comply with the requirements of this procedure and the provisions of the MLC of 2006. The copy of the employment agreement of seafarers should also be accessible for review on board by officials of a competent authority, including those ports to be visited. For this purpose, signed employment agreements and any other applicable collective agreement shall be forwarded to the ship. Prior to the repatriation process of the navy and when a new member boarding the ship after the preceding procedure the delivery process is equally necessary.

For example, the master must prepare adequate handover notes in order to familiarize his reliever to the ship. This registration must include information such as the cargo on board, port of loading, port of unloading, the cargo status, stability status, timetables, hazardous cargo, the trip planning, ship characteristics, equipment, maintenance, chartered Party, ship's certificates, ship yards and supplies, the routine messages to be sent, crew evaluation and ship's budget and capital.

The reliever will thus assume the responsibility that all tasks are properly calculated and should be familiar with the condition of the ship and the cargo for the purpose of the safety of the ship. In the corresponding change of first engineer the following information shall be rotated in relation to the maintenance program, the condition and report of machinery, the management, inventories and budget, the technical equipment and characteristics, the evaluation of the engine crew etc.

## **CHAPTER 8: STANDARDS ON REPATRIATION, COMPENSATION AND SOCIAL SECURITY**

### **8.1 Repatriation**

The purpose of the MLC Convention is to ensure that seafarers can return home, at no cost to themselves under the circumstances and under the conditions laid down in the code. Each member shall, respectively, require that ships flying its flag provide financial security to ensure that seafarers are repatriated in accordance with the terms of the code.

In particular, the mandatory provisions in principle provide for the repatriation to be ensured in the following cases:

- (a) If the employment contract of the seafarer expires while he is on board
- (b) when the seafarer's contract is terminated or by the owner or the seafarer himself for valid reasons
- (c) Where the seaman is no longer in a position to perform his duties in accordance with his employment contract or may not be required to perform them under the specific circumstances.

In addition, each member must ensure that appropriate legal provisions or collective bargaining agreements exist, defining the circumstances in which seafarers are entitled to repatriation in accordance with the above B and C, the maximum duration of service periods on board, after which the seaman is entitled to repatriation not exceeding 12 months, the precise rights to be granted by the shipowners for repatriation, including those relating to the destination repatriation, the mode of transport, the costs to be covered and other arrangements.

Each member prohibits shipowners from requiring seafarers to pay a deposit to cover the cost of the repatriation at the start of employment and also to collect the cost of the repatriation from the wages of the Seafarers or other rights, unless a sailor has seriously violated his obligations under national legislation or the applicable collective agreements.

National laws and regulations should not affect any right of the shipowner to recover the cost of repatriation on the basis of contracts concluded with third parties. If a shipowner does not take over the repatriation or does not cover the cost then the competent authority of the member whose flag the ship is flying shall be called upon to arrange for repatriation. If it does not, the state from which the seafarers are to be repatriated or the state of which they are nationals can arrange for their repatriation and seek the cost of the member whose flag the ship is flying. In turn, the Member State may recover those costs from the shipowner, but in and in this case, with the above reservation, the repatriation costs should under no circumstances be borne by seafarers.

### **8.2 Compensation**

The purpose of the regulation is to ensure that seafarers are protected from the economic consequences of sickness, injury or death arising during or linked to employment, without prejudice to other rights. In particular, the standard provides that the shipowners bear the cost of

the disease and the injury of seafarers occurring or arising from the date deemed to be taking up duties until repatriation. In addition, they must provide a financial guarantee to ensure compensation in the case of the death or long-term disability of seafarers due to an accident at work, sickness or risk, as defined in national law, or Collective agreement.

Also a member who paid the cost of the repatriation in accordance with this code may hold or request the detention of the ships of that shipowner until the reimbursement of costs. In addition, each member shall facilitate the repatriation and replacement of seafarers in its ports and, in particular, may not deny the right of repatriation to any marine due to the owner's financial conditions or due to the inability or his reluctance to replace the Navy. Finally, each member must require ships flying its flag to bring and Dispose to seafarers a copy of the applicable national provisions on repatriation written in an appropriate language.

The costs incurred by the shipowner include at least a) the transition to the destination chosen for repatriation, by appropriate and rapid means, i.e. mainly by air and the carriage of luggage up to 30kg (b) the stay and maintenance as well as salaries and allowances as provided for by national provisions or collective agreements, once seafarers leave the ship until they reach the destination repatriation and c) medical care, when they are necessary, until seafarers are medically suitable to travel to repatriation. In any case, the days required for repatriation are not deducted from paid leave payable to seafarers. They are also obliged to cover the costs of medical care, including the treatment of necessary medicines and therapeutic apparatus, nutrition and subsistence until recovery or until the disease or impotence is declared permanent, as well as the Funeral expenses in case of death. Lastly, they must take measures to safeguard the assets remaining on board the ship by sick, injured or dead seafarers and for returning to their own or their relatives. Limitations of liability may be provided for by national laws, however, on the basis of the following parameters.

They cannot limit responsibility for covering medical and maintenance expenses and subsistence in a period of less than 16 weeks from the day of injury or onset of illness. When the disease or injury causes incapacity to work, then a full salary is paid up to repatriation (bonus may be excluded), while national provisions and collective agreements may stipulate whether an entire salary or part of it will Paid from this point up to recovery or before.

It is not possible to limit the owner's liability to pay wages, in whole or in part, for a marine that is no longer on board, in a period of less than 16 weeks from the day of the injury or the onset of the disease. National laws can exclude the shipowner from liability if a) the injury was caused in a manner different from the service of B) the injury or illness is due to the intentional violation of Navy C) The disease or disability is concealed Intentionally from the Navy. National regulations may exempt the shipowner from the obligation to cover medical, subsistence and maintenance expenses if they are covered by public social bodies.

Seafarers are entitled to adequate compensation in case of injury, loss and unemployment as a result of the ship's loss/destruction. Unemployment compensation is paid for the days when the sailor is actually unemployed and calculated on the basis of his salary, but the total amount of compensation paid in each seafarer can be limited to wages of two months.

### 8.3 Social Security

The aim is to ensure that measures are taken to access the social security of seafarers and dependent members in order to achieve progressively full social protection for seafarers, corresponding to those working on land. The main reason for the wording of these provisions was the general concern associated with the national legislation of States that do not extend this coverage to non-residents or non-indigenous people, with the result that seafarers and dependants remain without Protection. These provisions have achieved a high degree of political agreement, demonstrating that it was a continuous and common objective for all countries<sup>25</sup>

The specific subject of social security is medical care and sickness, unemployment, accident, family, maternity, disability and survivor benefits and old-age benefits, complementing the protection It is provided for in these Regulations 4.1 for medical care and 4.2 for the liability of shipowners. Each member during the ratification of the contract must provide arrangements covering at least three of the nine of the above (medical care, sickness and Accident workers allowance) for seafarers working on a ship flying the flag of Country (flag State) and/or seafarers habitually resident in the country (State of residence)

To the extent that it complies with their national law and practice, members may cooperate to ensure social security rights for all seafarers irrespective of the place of residence, taking into account factors such as what is the A more favourable level of protection based on the respective laws and the preference of the Navy. Also, each member must provide social security protection as defined in the contract to all seafarers working on the ships flying its flag. Further to the employment contract of the Navy, the means of protection of social security to be provided to the Navy by the shipowner and any other relevant information, such as statutory deductions from wages and Shipowners ' contributions<sup>26</sup>.

## **CHAPTER NINE: EVALUATION PROCEDURE**

### **9.1 Introduction**

All inquiries related to the support issues of seafarers should be directed to the Crew department and a copy to be delivered to the Manager. The Crew operator will take the responsibility to acknowledge any requests and waivers. When we refer to a seafarers' waiver, we mean the written warning of a seafarer for repatriation. The concept of performance evaluation is a part of the performance management system that involves as tools the system of remuneration, recruitment, education, the re-informing of the employee and the improvement of the attracting and selection system.

### **9.2 Evaluation and appraiser characteristics**

To be effective, however, a system of evaluation should be specific and clear to all, appropriate to the specificities of each business, acceptable to the evaluated, reliable and objective, to identify the objectives, results and points and be efficient in relation to the time required to manage it. In addition, the evaluator should be able to understand the concepts of the assessment and measurement criteria, be capable of targeting and measure the results, analyse the causes of divergence between desired and performance and finally be able to assess the weaknesses in order to improve the seafarer.

The most important is the person who conducts it, who is, when it is done, whether it is written orally and whether a group or individual evaluation is made. For example, the senior officers should be examined by the Fleet Superintendents of the company and for the lower crews by the captain himself and the chief engineer respectively. Evaluation, also, takes place when a representative of the Office goes on board a ship. This is essentially the informal assessment and the personality, behavior and effectiveness of the seafarer at work is usually considered. The evaluation criteria differ for each seafarer on board for example, the importance of the officers is the professional ambition, the career in shipping and the long-term relationship with the company, the know-how, the maturity, the experience (necessary sea service), the proper taking of initiatives and finally the ability to communicate, etc. For the lower crew importance is the professional conscience, the teamwork, the compliance with the protection of the environment and the safety of the ship, diligence, speed, accountability, discipline and most importantly contribute to the correct condition of the ship. To have proper results analysis process there should be the appropriate forms and the evaluation manual which will always be available to Crew manager, Manning Agent/crewing company.

Part of the process is also the control of retention rate (the stay of staff in the company), the aggregation of wages and recruitment needs. However, the evaluation should be assessed and whether we improve the performance of our seafarers by giving them the appropriate incentives so that we can decide how much it is necessary to re-recruit them after the end of each Contract.

### 9.3 Promotion after evaluation

Part of the right evaluation system is the creation of incentives and targets for seafarers, such as promotion. First of all, it is a prerequisite the officers to be certified. In general, there is a policy for companies to recruit deck officers and engineers who are skilled and experienced at higher levels than those required by minimum manning standards set by the state Flag of each vessel. Also the necessary sea service is a basic prerequisite. Masters, for example, must be holders of a certificate of competency (II/2) issued by a flag state.

Promotions in higher positions will usually be made through internal promotions, provided that there are suitable candidates within the company with the appropriate skills and experience. When it is considered that there are no suitable candidates, the company reserves the right to consider external candidates.

Some of the criteria that a company can consider if the sailor meets the appropriate conditions are the minimum sea service in a particular cargo transport, the minimum total sea service, minimum Sea service with the specific company, Certificate of Competency, All certificates for the STCW '95, mandatory training requirements of the company, number of good evaluation reports with promotion recommendation, positive results after conducting an interview with the crew manager

### 9.4 Need for additional training after evaluation (Training after evaluation)

Through the evaluation process, however, we need to identify the disadvantages of each seafarer and invest in the improvement of its performance through special educational programs. Of course, a company has to decide how much it can invest financially in any education. For example, if a sailor has noted that he has followed a kind of minor anti-environmental Act, he should attend a seminar on the relevant topics. This kind of process inspires customers and of course the ship's own personnel. Also one of the usual training carried out particularly for senior officers is relevant to "Leadership and Management". The leader of the group is to make the team members work in the right direction in the most appropriate way. Being a team leader or officer has nothing to do with controlling employees. In the ship the officer is, primarily and above all, responsible for the development and cultivation of an environment. The aim is to have a conscience, a common goal, interaction, the possibility of action in a unified way. Many times in the process of travel the tension dominates and many times the safety of the ship can be compromised. So if such events have been observed, our crew would be fertile to attend a behavioral seminar called "Conflict Management". The purpose of this seminar is to go to the problem, not for the individual but for the common goal. If the person feels threatened, it will be his natural reaction to defend himself. If the person attacks personally, no one should be left with a wrong emotional response. Instead it is recommended to avoid this by maintaining a rational and objective oriented perspective. We must identify the cause instead of only identifying our own interests in order to understand the attitude of the other person as well as their basic needs. It is therefore important to identify the problem in a mutually acceptable way to both parties. In addition, a training which is often undertaken by companies is the "Emergency response

Training”. Many times a sailor may have been involved in an accident but may not. But training for seafarers as an additional incentive to optimize his performance on the ship next time. So this tutorial reduces risks of loss, damage and harm of human and not, as well as protect the reputation of the company at the same time. So the staff can now respond effectively and make the right decision-making quickly and confidently. In addition, a company can invest in engineering seminars concerning new technological developments in engines etc. The fact is that the market for marine engines is influenced by technical developments but mainly by the activity of new shipbuilding and the evolution of ship sizes. These in turn, depend on the global economy and the need to replace older ships. The interdependence of the market and technological developments is clearly found in the case of marine engines. For the foreseeable future, e.g. diesel engines will continue to have the overwhelming majority in ship facilities. For the near future the targets are for engines that combine fuel flexibility, almost zero pollutants, optimum adaptability to operating conditions and lifelong reliability. The MAN PrimeServ Academy, for example, offers courses in both ME-C, ME-B and ME machines, such as "ME Standard electrician maintenance ". The courses in turbochargers, as well as in advanced maintenance etc. Finally, many times it is recommended to the Chief Cook on board ships to attend seminars so as to improve their performance more safely in a specific range of techniques and food. The kitchen function is taught, the programming in the right food order, the healthiest foods and the creation of special diets. Even on ships that vary nationalities, there is a curriculum on these peoples based on cultural and religious requirements. Proper feeding of seafarers is a very serious issue in particular before the start of specific weights. Finally, in the event of a naval dismissal from the ship, the shipping company or the Navy's employer should convene a land hearing to reconsider the conditions of the seafarer's dismissal and decide whether the dismissal should be confirmed.



## CONCLUSION

With regards to the roles and requirements of the maritime profession, it is clear that discipline and a thorough understanding of the hierarchy of duties are required. For example, deck officers must obey the commands of the Master, and respectively the engine, of the Chief engineer. All crew members should be fully harmonized and cooperated with respect and dedication to achieve the best possible work.

All seafarers' certificates, one by one, must be checked if they are in line with the international regulations and requirements. Apart from the above, the interview should only be conducted by fully qualified individuals in the field of specialization. Also measuring the results of psychological assessment is an important tool to avoid an accident due to human error. Elements such as critical ability, ease of decision making, officer leadership, emotional intelligence and respect for the protection of the natural environment are essential criteria for selection. Every company has to use similar tests or electronic platforms in order to have valid results.

Crew department requires great patience, flexibility, open mindset, honesty and a spirit of justice. The employee of the department must have the ability to predict the evolution of the people on board, because this situation is very different from being judged as an employee ashore. Ships require enough time to be able to have a correct and objective judgement for one person. So employees should be characterized by great insight. That is why the selection of crew is one of the main responsibilities of the Crew Department. The most serious goal of the crew department is mainly to find seafarers with good training and appropriate experience. The choice of the nationality of the crew is also a decision that must be taken seriously. They must therefore be able to manage a huge system of records associated with the seafarers documents, the training file, the medical history, etc. Also, the common use of the electronic platform with all the necessary certification of seafarers within it is also an auxiliary tool. So when the crew department considers that a seafarer is now accepted into the business, the next step is usually that of his training, based not only on the company's system but also on his own shortcomings and needs. A company that usually respects its existence in the shipping industry must provide programs related to the prevention of future accidents.

Another issue that is also worth noting that despite the attractive aspects of this profession, such as exploring different peoples or monetary satisfaction or modern navigation methods etc. young people do not find the job at sea interesting and the decreases in the number of students in maritime training institutes are bigger year by year.

We must therefore understand the importance of maritime delivery so that this industry remains competitive, because if it turns out to be non-competitive it will endanger safety, the environment. Also, if there is a shortage of seafarers, this can create problems across the whole range of relevant branches. There is also a wide range of onshore activities in which experience at sea is considered an advantage or a prerequisite for hiring staff. It is therefore expected that the shortage of seafarers will in the long run lead to a risk of staff shortages. The professional heritage through the maritime profession is indisputable and the maritime schools must exist to continue to have the know-how for maritime safety and the maritime industry in general.

At this point it is therefore worth noting that international organizations have made a positive contribution to promoting maritime work. Typically, the ILO provides for each country to set a minimum wage even though it does not set a specific global wage. It also guarantees the social coverage of accident and disability insurance even if a sailor has to seek the justice of a country in which his ship is registered in terms of its working conditions. Also Port State Controls, is a valuable tool to comply with all relevant maritime labor standards on ships.

In conclusion, therefore, respecting the maritime profession and aiming to keep it competitive, we must protect it by highlighting to the youngest its attractive sides in addition to the requirements set out above. Employees in the crew section should be fully conscious of their momentous role in the selection of seafarers, having a strong feeling of seamanship and justice. The success of a shipping company is based entirely on the quality of the people working on its ships and the creation of special and multiple criteria for their selection.

## Bibliography

- Korres Alkis, Thanopoulos Ioannis, Athens 2005, Maritime theory and entrepreneurship in the era of development, Interbooks.
- Alexopoulos A.-Fournarakis N, 2005, International conventions-regulations-codes.
- Maltesos S. Athanasios, 2013, The management of human Resources in Shipping, pp. 112, University of Piraeus.
- Alexopoulos A.-Fournarakis N., 2003 "International conventions-regulations – codes", Athens, Eugenides Foundation Editions,
- Asimomitis I. 2001, ' Classification societies and Inspections ', Editions Emm. N. Stavridaki
- Vlachos G.P.,-Alexopoulos A., 1996 "International organizations and Maritime Policy", Editions A. Stamouli, Piraeus,
- William M. Alexandros, 2009 "quality control in the shipping business and the ship", Editions A. Stamoulis. Athens,
- Joanna Koukouli, LL.M 2016 Trends in Crew Management Seminar ‘Loss Prevention in Crew ManagementThe P&I Club perspective’. Claims Manager SCB (Hellas), Inc.
- Moira L. McConnell, October 2011, The Maritime Labor Convention, 2006 Reflections on challenges for flag State implementation, WMU Journal of Maritime Affairs
- Gerhard Kiehne, Research article, 1996 Investigation, Detention and Release of Ships under the Paris Memorandum of Understanding on Port State Control: A View from Practice , published on “The International Journal of Marine and Coastal Law”, Volume 11, Issue 2,
- STCW Including 2010 Manila Amendments, STCW Convention and STCW Code’, (Edition 2011 London), International Maritime Organization
- STCW A Guide for Seafarers Taking into account the 2010 Manila amendments, International Transport Worker’s Federation
- Employee development programme during Crew Conference in Manila (Scope of this Presentation: Building Corporate Identity and Performance)
- International Labour Standards Department, 2009, Guidelines for flag State inspections under the Maritime Labour Convention, 2006, ILO
- International Labour Standards Department, 2009, Guidelines for port State control officers carrying out inspections under the Maritime Labour Convention, 2006, ILO
- International Labour Standards Department, 2012, Handbook: Guidance on implementing the Maritime Labour Convention, 2006 and Social Security for Seafarers, ILO
- International Labour Standards Department, 2012, Handbook: Guidance on Implementing the Maritime Labour Convention, 2006 - Model National Provisions, ILO
- Loyd's List, March 8, 1990 Improve Staff Quality before Mega-Disaster,
- Gerhard Kiehne, Research article: Investigation, Detention and Release of Ships under the Paris Memorandum of Understanding on Port State Control: A View from Practice ,
- Røsæg Erik, 2000, Compulsory Maritime Insurance, Simply: Scandinavian Institute of Maritime Law Yearbook 2000, MarIus No 25

- [www.elinyae.gr](http://www.elinyae.gr), last log in 15/10/2019
- [www.naftikachronika.gr](http://www.naftikachronika.gr), last log in 15/10/2019
- STCW Guide from ITF [http://www.mptusa.com/pdf/STCW\\_guide\\_english.pdf](http://www.mptusa.com/pdf/STCW_guide_english.pdf), last log in 15/10/2019
- <http://www.ilo.org>, last log in 10/10/2019
- [www.bimco.org](http://www.bimco.org), last log in 10/10/2019
- <http://www.wikipedia.org>, last log in 13.10.2019
- [www.imo.org/en/Pages/Default.aspx](http://www.imo.org/en/Pages/Default.aspx), last log in 13.10.2019
- [www.ics-shipping.org](http://www.ics-shipping.org), last log in 13.10.2019
- <https://www.msiltd.com>, last log in 14.10.2019
- <https://toughnickel.com>, Article with the Different Ranks of Seafarers), last log in 13.10.2019
- <http://www.who.int/ith/updates/20160727/en>, last log in 13.10.2019
- <https://www.american-club.com/page/pemes>, last log n 18/10/2019
- <http://www.safety4sea.com/page/1895/9/maritime-companies-move-to-e-documents>, last log in 31/10/2019
- <https://safety4sea.com/ilo-recommendations-to-ensure-equal-opportunities-for-seafarers>, last log in 31/10/2019
- <https://www.kathimerini.gr/924751/gallery/periodiko-k/reportaz/naytikh-kai-naytiliakhekpaideysh>, last log in 12/11/2019
- Port State control, Annual Report 2011  
<https://www.parismou.org/Content/PublishedMedia/f5e82ca7-124e-4430-afec4f53dee51093/Paris%20MoU%20Annex%2010%20Examination%20of%20certificates%20and%20documents.pdf>, last log in 25/10/2019
- <https://www.hg.org/articles-for-260-areas-of-law.asp>, last log in 16/10/2019
- <http://www.standard-Club.com>, last log in 26/10/2019
- <http://www.itfseafarers.org>, last log in 28/10/2019