

**ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΕΙΡΑΙΩΣ**



**ΤΜΗΜΑ ΝΑΥΤΙΑΚΩΝ ΣΠΟΥΔΩΝ**

**ΠΡΟΓΡΑΜΜΑ ΜΕΤΑΠΤΥΧΙΑΚΩΝ**

**ΣΠΟΥΔΩΝ στην ΝΑΥΤΙΑΚΗ**

**ΔΙΟΙΚΗΤΙΚΗ**

**The role of the DPA and the procedures of the  
Internal Audit**

**Σπυρίδων Τσουκανάς**

*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

Οκτώβριος 2019

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## **Acknowledgements**

The subsequent thesis is the result of far-reaching labor and study and was accomplished in the framework of the M.Sc. in Shipping Management of the University of Piraeus

I would first like to thank my thesis advisor Mr. Dionisios Polemis of the M.Sc. in Shipping Management at University of Piraeus. The door to Prof. Polemis office was always open whenever I ran into a trouble spot or had a question about my research or writing. He consistently allowed this paper to be my own work, but steered me in the right the direction whenever he thought I needed it. I would like to express my very profound gratitude to my beloved parents, my brother, my sister for providing me with unfailing support and continuous encouragement throughout my time of study and through the process of researching and writing this thesis. This accomplishment would not have been possible without them. Thank you.

## Περίληψη

Στην διπλωματική αυτή εργασία παρουσιάζονται αναλυτικά κάποια περιστατικά που συνέβησαν και οδήγησαν στην δημιουργία – εμπλουτισμό για τους κώδικες ISM και ISPS. Σχετικά με τους κώδικες γίνεται παρουσίαση για τους σκοπούς, τους ορισμούς, τα αντικείμενά τους, τις δυσκολίες που αντιμετώπισαν κατά την εφαρμογή τους. Αναλύεται η διαδικασία του εσωτερικού ελέγχου σε ένα πλοίο και κατά πόσο η ναυτιλιακή εταιρεία οφείλει να συμμορφώνεται στους κανονισμούς. Παρουσιάζονται οι άνθρωποι που λαμβάνουν μέρος στη διαδικασία τους ελέγχου και βήμα βήμα η διαδικασία του. Από την εργασία αυτή δεν θα μπορούσε να λείπει ο ρόλος του αρμόδιου ανθρώπου στην ξηρά και τον ρόλο του στη ναυτιλιακή εταιρεία. Κλείνοντας παρουσιάζονται τα συμπεράσματα της εργασίας αυτής που προέκυψαν και κατά πόσο βρέθηκαν δυσκολίες στην διεκπαιρέωσή της.

Λέξεις κλειδιά (ISM, ISPS, Internal Audit, Procedures, DPA)



## **Abstract**

The thesis work provides a detailed account of some incidents which have occurred and led to the creation - enrichment of ISM and ISPS codes. The Codes are presented for the purposes, definitions, objectives and difficulties encountered in their implementation. The internal audit procedure on a vessel is analyzed too and whether the shipping company has to comply with the regulations of the ISM and ISPS code. This thesis presents the people who are involved in the internal audit process and step by step its process itself. This thesis could not lack the role of the designated person ashore and his role in the shipping company. To sum up, there is a conclusion of this thesis and the difficulties encountered in its creation are presented too.

**Key Words (ISM, ISPS, Internal Audit, Procedures, DPA)**

## Introduction

The International Safety Management Code (ISM) empowers the shipping companies to have arrangements for executing inside and outside assessments to affirm the vessel's movement and that the shore substance is doing what the Safety Management System recommends and permits. Inside SMS or ISM reviews are considered more critical than the outside reviews for checking the adequacy of the framework, since shipping companies stand to pick up or lose more than the outside review bodies on the off chance that the framework comes up short. The company, the representatives, shipmasters, officers and groups 'own' the security administration framework and have a coordinate intrigued in guaranteeing that it is successful. As a result, the inside SMS review, which speaks to these interface, ought to be at slightest break even with on the off chance that not surpass the exhaustiveness of the outside SMS review handle.

In the first chapter of this thesis it is detailed presented the MS Herald of Free enterprise accident which can be considered the background of the ISM Code. Moreover, it is fairly presented the purposes of the ISM Code, its definitions, application form, and its objective.

Moving on to chapter 2, it is fairly presented the USS Cole incident and how this one along with other terrorist attacks led to the change of the ISPS Code so as to provide security regulations too. Also, the regulations, procedures and challenges of the ISPS Code are detailed presented to this chapter.

On chapter 3, it is presented the procedures a shipping company has to follow, along with the ship security plan. Moreover, the internal audit, and the scope are fairly presented in this chapter.

On chapter 4, there is a more detailed presentation that concerns the procedures of the internal audit, step by step.

On chapter 5, it is presented the role of the DPA in the shipping company along with some paragraphs of the ISM Code that concern DPA's role.

And finally on chapter 6, there is the conclusion of this thesis and it is explained how easy or difficult the process of it was.

## Chapter 1 – MS Herald of Free Enterprise



Figure 1 MS Herald of Free Enterprise

Source: Maritime Cyprus - <https://maritimecyprus.com/2018/03/04/flashback-in-maritime-history-herald-of-free-enterprise-capsized-and-sank-on-6-march-1987-with-193-lives-lost/>

In this chapter, it is fairly presented the MS Herald of Free Enterprise incident. MS Herald of Free Enterprise was a roll-on/roll-off (ro-ro) vessel which upturned seconds after departing the Belgian port of Zeebrugge on the night of 6 March 1987, slaying 193 travelers and crew members. The eight-deck car and passenger vessel was retained by Townsend Thoresen, premeditated for quick stuffing and unpacking on the viable cross-channel road, and there were no incontrovertible partitions. The vessel departed from the port with her bow-door wide open, and the sea water instantly swamped the areas. Right away, she was lying on her side in shallow water. The instant cause of the sinking was instituted to be neglect by the secondary boatswain, who was sleeping in his log cabin when he should have been sealing the bow-door. Still, the authorized investigation located more responsibility on his managers and a universal nation and ethos of deprived communiqué in Townsend Thoresen. The vessel was salvaged, put up for sale, and sold to Naviera SA Kingstown on 30 September 1987, given the new name Flushing Range. It was occupied to Taiwan on 22 March 1988 to be ripped to

pieces. From the time when the tragedy happened, developments have been made to the design of ro-ro vessels, with sealed ramps, gages showing the spot of the bow doors, and banning of unbroken areas.

On the day the ferry overturned, Herald of Free Enterprise was operating the route between Dover and the Belgian port of Zeebrugge. This was not her ordinary path and the acquaintances slate at Zeebrugge had not been designed explicitly for the Spirit-class vessels: she used a single deck, averting the concurrent stuffing of both E and G decks, and the slope could not be elevated high enough to reach E deck. To recompense for this, the vessel's bow ballast tanks were packed. The vessel's natural sleek was not refurbished after stuffing. Even if the Herald of Free Enterprise had survived, she would have been adjusted to remove the need for this method. Outstanding to a cut-price ticket deal, the vessel was functioning at full bulk, which made it more challenging to depart on time. The master and first officer would be reproached by their bosses if the vessel reached even just a few minutes late. It was an ordinary repetition for the vice boatswain to seal the doors before anchorages were released. However, the assistant boatswain, Mark Stanley, had resumed back to his cabin for a short break after scrubbing the car deck upon arrival, and was still asleep when the harbor-stations call announced and the vessel dropped her quays. The first officer, Leslie Sabel, was asked to remain above the deck to make certain the doors were sealed. Sabel said he alleged he saw Stanley forthcoming. He was extremely wounded in the tragedy and the court settled that his evidence was wrong. It is alleged that, under force to get to his port station on the bridge, he had left G deck with the bow doors open in the belief that Stanley would arrive as soon as possible. The court also labelled the attitude of boatswain Terence Ayling, supposed to have been the last person on G deck. He was questioned why he did not sealed the doors, given the fact that there was no one else over there to do it. He answered that it was not his responsibility. The court however, acclaimed his effort in the rescue operation.

Captain David Lewry presumed that the doors had been sealed ever since he could not grasp them from the wheelhouse outstanding to the vessel's design, and had no display beams in the wheelhouse.

The vessel departed her berth in Zeebrugge inner port at 18:05 GMT with a crew of 80 members and booming 459 passengers, 81 cars, three buses and 47 trucks. She passed

the outer mole at 18:24 GMT and upturned about four minutes later. When the vessel extended to 18.9 knots, 90 seconds after departing the port, water began to enter the car deck in large amounts. The resulting free surface effect destroyed her steadiness and solidity. In a matter of seconds, the vessel began to list 30 degrees to port. The vessel temporarily righted her beforehand listing to port once more, this time overturning. The total occurrence took place within the time 90 seconds. The water rapidly touched the vessel electrical systems, terminating both main and emergency power and sending the vessel off in darkness. The vessel completed on her side half-submerged in shallow water almost one kilometer from the coast. Only an accidental turn to right-hand in her last instants, and then upturning on a sandbar, prevented the vessel from sinking utterly in much deeper water.

Crew onboard, noticed nearby dredger Herald of Free Enterprise's lights evaporate, and informed the port establishments. They also testified that the bow doors seemed to be wide open. The alarm was elevated at 19:37 local time (18:37 GMT). Salvage helicopters were quickly transmitted, shortly followed by backing from the Belgian Navy, who was enterprise an exercise in the zone. Wolfgang Schröder, the German captain of a near vessel, was applauded by Prime Minister Margaret Thatcher and received a medal from King Baudouin of Belgium for his heroic energies in rescuing passengers.

The disaster led to in the passing away of 193 people. Many of those on board had taken advantage of a elevation in The Sun newspaper proposing inexpensive outings to the continent. Most of the dead were surrounded inside the vessel and capitulated to hypothermia because of the glacial water. The salvage energies of the Belgian Navy limited the death clang. Recoverable bodies were detached in the days follow-on the misfortune. During the salvage the tide began to upswing and the salvage team was forced to break all efforts until daybreak. The last number of the people leftward on board pass away from hypothermia.

Numerous folks have been labelled as the Cole bombing hatch. Amongst the accusations smoothed by a Guantanamo Military Commission alongside Abd al-Rahim al-Nashiri, seized in late 2002, was that he was the instigator of the Cole bombing. Al-Nashiri was one of the three high-value captives the George W. Bush Presidency was

to recognize had been exposed to waterboarding and other extended questioning methods.

Abu Ali al-Harithi was one of the first alleged terrorists to be embattled by a missile-armed Predator drone. He, too, was labelled as the hatch of the Cole bombing.

A memorial to the wounded of the outbreak was dedicated at Norfolk Naval Station in Virginia on 12 October 2001. It was founded along the shore of Willoughby Bay, and overlooks the network used by Navy vessels transiting to sea. Seventeen low-level indicators stand for the first flush of youth of the seafarers, whose lives were cut short. Three tall granite monuments, each bearing brass plaques, stand for the three colors of the American flag. A set of brown markers surrounding the memorial symbolize the blackness and gloom that overcame the vessel. In addition, twenty eight black pine trees were lodged to represent the seventeen seafarers and the eleven children they left behind. The memorial was supported by assistances from thousands of private people and businesses to the Navy-Marine Corps Relief Society, which gave the memorial to the Navy. Its plan originated as a vision of USS Cole crew members, who then teamed with Navy designers and the Society to finalize the project. The Cole honoring is located about one hundred and fifty meters west of the Naval Station memorial for the USS Iowa turret burst. There is also another celebratory marker placed at Wisconsin Square in the city of Norfolk, near USS Wisconsin.

In conclusion of this chapter, the results of this incident led to the adoption of a code to help prevent incidents and accidents like this one.

## **1.1 Purposes of the ISM Code**

The purposes of the ISM Code are to guarantee safety at sea, inhibition of human injury or loss of life, and avoidance of damage to the environment, in particular, to the marine environment, and to assets. Safety management purposes of the Company should be, first of all to deliver safe practices in vessel operation and a safe working environment. Also, to deliver safeguards against all notorious threats; and unceasingly develop safety management services of personnel ashore and aboard vessels, containing preparing for emergencies related both to safety and environmental protection. The safety and management system should guarantee amenability with mandatory rules and

regulations; and that appropriate codes, guidelines and standards recommended by the Organization, Administrations, classification societies and maritime industry organizations are taken into consideration.

## **1.2 Definitions of the ISM Code**

In order to recognize and appreciate the ISM code, it is essential to know definitions of a few significant terms which define the whole structure of IMO's ISM code. To begin with, there is the Safety Management System (SMS). The safety management system is an organized and acknowledged system under the International Safety Management (ISM) code which allows shipping companies and its vessel's crew to effectively contrivance all safety policies regarding vessel, crew, and environment while on board. Also, there is the Safety Management Certificate (SMC). Safety management certificate (SMC) is a certificate delivered to a vessel demonstrating that the company and its vessel personnel function in accordance with the safety management system (SMS). Moreover, there is the Document of Compliance (DOC). Document of compliance is a certificate dispensed to a shipping company which complies with all the requests of the ISM code.

Document of compliance is one of the most important documents of the vessel which are often tested during port state control survey. Moving on there is the Objective Evidence. Objective evidence is any procedure, practice of information, histories, or statements of facts which designates execution of safe management system by the shipping company and its vessels. The objective evidence is based on observations, quantities, or tests that are made during an audit and which can be verified. Next there is the Non Conformity and Major Non-Conformity. When objective evidence points to non fulfilment of a explicit obligation stated by the safety management system, a situation of non-conformity is considered to have happened. A major non-conformity is a tremendously severe condition which poses important risk to the safety of personnel, vessel, or the environment. It signposts a major gap in effective and systematic enactment of the ISM code. Major non conformity would require instantaneous corrective action to be taken by the vessel's management. Last but not least, there is the Anniversary Date. Anniversary date can be demarcated as the day and

month of each year which results the expiry of a relevant certificate or document of the vessel under the ISM code.

### **1.3 Objectives of the ISM code**

The objectives of the Code are to guarantee safety at sea, avoidance of human injury or loss of life, and avoidance of damage to the environment, in particular, to the marine environment and to assets. To be more specific, safety management objectives of the company should, firstly offer for safe applies in vessel operation and a safe working environment. Also, it should launch safeguards against all acknowledged threats and incessantly expand safety management aids of personnel ashore and aboard vessels, containing organizing for crises related both to safety and environmental protection. Moreover, the safety management system should be able to certify acquiescence with compulsory rubrics and procedures and those appropriate codes, strategies and standards recommended by the Organization, Administrations, classification societies and maritime industry administrations are taken into consideration.

### **1.4 Application**

The necessities of this Code may be smeared to all vessels. Firstly, there are the functional requirements for a Safety Management System (SMS). Every company should advance, contrivance and keep a Safety Management System (SMS) which contains some of the succeeding functional requirements. To begin with, it contains a policy about safety and environmental protection. Also, it contains directives and processes to confirm safe procedures of vessels and protection of the environment in obedience with relevant international and flag State legislation. Moreover, it contains demarcated stages of authority and lines of communication between, and amongst, shore and shipboard personnel. It contains measures for recording accidents and non - conformities with the requirements of this Code. Last but not least it contains processes to fix for and reply to emergency situations and actions for internal audits and management reviews.

[https://www.afcan.org/dossiers\\_reglementation/ism\\_p15\\_gb.html](https://www.afcan.org/dossiers_reglementation/ism_p15_gb.html) [Πρόσβαση 4 October 2019].



[http://www.imo.org/en/OurWork/Security/Guide\\_to\\_Maritime\\_Security/Documents/IMO%20and%20Maritime%20Security%20-%20Historic%20Background.pdf](http://www.imo.org/en/OurWork/Security/Guide_to_Maritime_Security/Documents/IMO%20and%20Maritime%20Security%20-%20Historic%20Background.pdf)

[Πρόσβαση 28 August 2019].

ABS Academy [Έντυπο πακέτο διαφανειών]

## Chapter 2 - ISPS CODE

### 2.1 USS Cole bombing



Figure 2 USS Cole

Source: Maritime Cyprus - <https://maritimecyprus.com/2016/10/29/flashback-in-history-terrorist-attack-on-uss-cole-on-12-october-2000/>

Moving on to chapter two, it is fairly presented the USS Cole incident and how this one along with other terrorist attacks led to the change of the ISPS Code so as to provide security regulations too. Also, the regulations, procedures and challenges of the ISPS Code are detailed presented to this chapter. The USS Cole bombing was an attack alongside USS Cole, a directed warhead destroyer of the United States Navy, on 12 October 2000, while she was being resupplied in Yemen's Aden harbor. Seventeen U.S. Navy sailors were killed and 39 injured in the fatal attack against a United States naval vessel since the USS Stark episode in 1987. The association al-Qaeda appealed charge for the outbreak against the United States. A U.S. judge has held Sudan responsible for

the outbreak, while another has unconstrained over \$13 million in Sudanese solid resources to the relatives of those killed. The United States Navy has revised their rules of appointment in response to this attack. Another judge unconstrained over 25 million in other Sudanese assets to pay off.

Concerning the attack, on the daylight of Thursday, 12 October 2000, Cole, under the grasp of Commander Kirk Lippold, stopped in Aden harbor for a dull fuel stop. Cole finished with its berth at half past nine and began refilling at half past thirty. Around half past eleven local time, a slight fiberglass boat resounding C4 explosives and two suicide bombers reached the harbor lateral of the demolisher and exploded, creating a quite enormous gasp around twelve to eighteen meters in the vessel's port side, according to the commemorative bowl to individuals who lost their lives. Ex CIA intellect officer Robert Finke said the explosion seemed to be caused by C4 explosives casted into a designed charge against the body of the boat. It was around 180 to 320 kg of explosive that were used. A big amount of the discharge arrived at a motorized space below the vessel's galley, aggressively pushing up the deck, thus slaying crew members who were getting ready for lunch break. The crew struggled flooding in the manufacturing spaces and had the injury under control after three days. Divers checked the exterior and resolute that the overturn had not been smashed. The seafarers that were bruised in the blast were taken to the United States Army's Landstuhl Regional Medical Center near Ramstein, Germany, before being directed to the United States. The attack was the most fatal compared to a United States marine vessel ever since the Iraqi attack on USS Stark on 17 May 1987. The unequal conflict outbreak was ordered and engaged by the terrorist organization al-Qaeda. In June 2001, an al-Qaeda staffing video introducing Osama bin Laden boasted about the attack and stimulated similar outbreaks.

Al-Qaeda had formerly attempted a parallel but less exposed attack on the United States Merchant marine destroyer USS, The Sullivan, while in docks at Aden on 3 January 2000, as a part of the 2000 millennium occurrence strategies. The strategy was to cargo a vessel full of explosives and to ignite them near The Sullivan. Nevertheless, the vessel was so overloaded that it sank, compelling the attack to be uninhibited.

Preparation for the October outbreak was deliberated at the Kuala Lumpur al-Qaeda Summit from January 5 to 8, presently after the unsuccessful endeavor. Along with

other conspirators, the conference was appeared by future 11 September hijacker Khalid al-Mihdhar, who then moved to San Diego, California. On 10 June 2000, Mihdhar left San Diego to stopover to his spouse in Yemen at a community also used as a transport network hub for al-Qaeda. Afterwards the blasting, Yemeni Prime Minister Abdul Karim al-Iryani testified that Mihdhar had been one of the key developers of the occurrence and had been in the state during the attacks was taking place. He later came back to the United States to join in 9/11 hijack of American Airlines Flight 77, which flew into the Pentagon, slaying 184 targets.

The primary marine vessel on the scene to help the stricken Cole was HMS Marlborough, a type 23 frigate of the Royal Navy, under the knowledge of Captain Anthony Rix. She was on route to the UK after a six-month disposition in the Gulf. Marlborough had full medicinal and damage control teams on board, and when her offer of support was accepted she directly abstracted to Aden. Eleven of the most badly wounded seafarers were transferred through MEDEVAC to a French military hospital in Djibouti and experienced operation beforehand being directed to Germany.

In a procedure of passage established in 1988 by USS Samuel B. Roberts aboard Mighty Servant 2, Cole was lugged from Aden onboard the Dutch semi-submersible heavyweight salvage vessel MV Blue Marlin. Cole reached in Pascagoula, Mississippi, on 13 December 2000, where she was reconstructed. FBI and NCIS managers were directed to Yemen to inspect the bombarding functioned in a tremendously aggressive atmosphere. They were come across at the airport by Yemeni Special Forces with individually soldier indicating an AK- 47. Presenters in the Yemeni house "shouting for jihad against America," were airing on local television every single evening. After some postponement, the Yemenis shaped a CCTV video from a harbor side safety camera, but the vital moment of the explosion was deleted. Nearby were so many supposed dangers that the mediators often slept in their clothes and with their armaments at their sides. At one point, the guesthouse where the agents remained was encircled with men in customary clothing, some in Jeeps, all carrying weapons. At last, the agents left their hostel to stay at a United States maritime vessel in the Bay of Aden, but they still did not feel safe. After being approved authorization from the Yemeni management to fly back to shore, an agent alleged that their helicopter took slippery act during the flight because of the fears of shoulder-launched surface-to-air armaments.

On 14 March 2007, a state judge advocate in the United States, Robert G. Doumar, reigned that the Sudanese government was responsible for the bombing. The ruling was distributed in response to a grievance filed against the Sudanese government by families of the dead, who stated that al-Qaeda could not have carried out the attacks lacking the sustenance of Sudanese officials. The judge claimed that there were considerable proofs in this situation presented by the skilled witness that the government of Sudan brought the particular bombarding of the Cole by feature of prior movements of the government of Sudan. On 25 July 2007, Doumar ordered the Sudanese administration to wage eight million to the families of the seventeen seafarers who passed away. He intended the quantity they had a duty to obtain by flourishing the income of the seafarers by the amount of years they would have continued to labor. Sudan's Justice Minister Mohammed al-Mard has specified that Sudan envisioned appealing the reigning.

By May 2008, all respondents condemned in the outbreak had run-away from prison or been unconstrained by Yemeni officials. On 30 June 2008, Brigadier General Thomas W. Hartmann, authorized consultant to the U.S. Military trial scheme, proclaimed custodies are being sworn against Abd al-Rahim al-Nashiri, a Saudi Arabian civilian of Yemeni origin, who has been held at the army prison in Guantanamo Bay, Cuba, since 2006. According to the Pentagon, the charges have been well-defined as "establishing and guiding" the blasting of USS Cole. The custodies still must be accepted by a Department of Defense official who supervises armed charges set up for terrorism suspects. The Pentagon would pursue the death penalty.

## **2.2 ISPS Code changes**

Later the event of the terroristic attack in the United States in 11th of September 2001 happened and the International Maritime Organization (IMO) decided to discourse the topic of maritime security. It was granted that revisions should be prepared to the Safety of Life at Sea Convention 1974 also known as the SOLAS Convention. Shriveling governments to the SOLAS Convention tied up the text of these revisions at a diplomatic symposium that took place at the IMO in London in December 2002. Prior the ISPS code, the SOLAS initial aim was the safety of the vessel at sea. Taking into account that security and safety are completely diverse parts, new improvements should be done in SOLAS and the Chapter XI, that comprehends measures to enrich and support maritime safety, by renaming to Chapter XI-1 and a new Chapter XI-2 was

furthered with its highest priority on maritime security. A brief historical perspective concerning the ISPS is that there were many dangerous and criminal activities in ports but also to associated facilities. People there were risking their lives very often. Also, there was a continuous increase in hijackings and piracies, more often observed in West Africa and Asia. In addition, there were international terrorist organizations around the world and several boarding by pirates each year in many parts of the world. Some remarkable maritime security incidents are:

- The hijacking of the SS Santa Maria (cruise ship), in La Guairá (Venezuela), 23 January 1961
- The hijacking of the Anzoátegui (cargo ship), off the Venezuelan coast, 12 February 1963
- The hijacking of the SS Columbia Eagle (cargo ship), 14 March 1970
- The hijacking of MV Avrasya (ferry), in the port of Trabzon in Turkey, 16 January 1996
- The attack on the USS Cole (Navy ship), in the port of Aden in Yemen, 10 June 2000
- The attack on the SS Limburg (oil tanker), in the Gulf of Aden, off the coast of Yemen, 6 October 2002
- The attack on the Super Ferry 14 (ferry), in the Philippines, 27 February 2004
- The attack on the M/V M. Star (VLCC oil tanker), in the Persian Gulf, 27 July 2010

The ISPS code generally looks after the security features of the vessel, seafarers, ports and port workers, to guarantee precautionary actions can be occupied if a security threat is unwavering. The most important purpose of the International Code for the Security of Ships and of Port Facilities (ISPS) will be explained right away. Firstly, ISPS is responsible to check out the movements, the actions of the people and the cargo while is tasking. Secondly, its role is to deliver a noteworthy security equal to the vessel and spring many obligations and roles at the diverse security level. Thirdly, its purpose is to gather information from almost the whole maritime industry vis-à-vis security threats and fulfilling means and methods to block the same. Also, to give individual roles duties

and characters for the position of the port state officer and the onboard officer position so as to hold risks for the maritime security in a worldwide equal. In addition, ISPS's aim is to search and find various security risks both onboard and ashore and establish ways that are suitable for any event that may occur. Moreover, its role is to give a policy for security calculations in order plans and processes to exist that will be able to adjust and work in fluctuating security levels. Also, another purpose of the ISPS code is to search and locate the faults and limitations that may exist in the vessel security and in the security of the port and find ways to advance them. The inauguration of important roles and tasks between governments, local administrations is also another important purpose of the ISPS Code. Last but not least, ISPS Code is responsible for the interchange of information about security between the international port and the network of the ship owners.

### **2.3 Timeline of the procedures of the change of the ISPS Code**

A timeline from the International Maritime Organization also known as IMO briefly shows the procedures that lead to the creation of the ISPS

- 11 September 2001 – coordinated large scale terrorist attacks
- November 2001 – IMO decides that a Security Code is needed
- February 2002 – there is the first meeting of the IMO Working Group
- 12 December 2002 – New requirements adopted by Diplomatic Conference
- 1 July 2003 – Nations approve by acclamation
- 1 July 2004 – Security Regulations come into force

On December 12, 2002, governments implemented improvements to the International Convention on the Safety of the Life at Sea (SOLAS), 1974, to boost the security of the vessels and port facilities. In addition to completing a new Chapter XI-2, 'Special Measures to Enhance Maritime Security,' the conference also approved a new International Code for the Security of Vessels and of Port Facilities (ISPS Code). Compliance with Part A of the Code is mandatory. Part B of the code contains guidance for applying the new SOLAS requirements and Part A of the Code. The improvements and demands became effective as of July 1, 2004. Contracting Governments may

delegate some of their responsibilities under the new security regime to Recognized Security Organizations (RSO). The new security regulations apply to vessels that are bigger than 500 GT and to mobile offshore drilling units.

## **2.4 regulations in the SOLAS chapter XI-2**

Some regulations in the SOLAS chapter XI-2 are:

- Regulation 1 – definitions
- Regulation 2 – application
- Regulation 3 – obligations of contracting governments
- Regulation 4 – requirements for companies and vessels
- Regulation 5 – specific responsibility of companies
- Regulation 6 – ship security alert system
- Regulation 7 – threats to vessels
- Regulation 8 – master’s discretion for vessel safety and security
- Regulation 9 – control and compliance measures
- Regulation 10 – requirements for port facilities
- Regulation 11 – alternative security agreements
- Regulation 12 – equivalent security arrangements
- Regulation 13 – communication of information

## **2.5 ISPS Code and its value on the vessels**

The cargo ships are exposed to security threats as they almost never transfer any armament of protection in case of a genuine occurrence. Piracy, terrorist attack,

fugitives are instantaneous extortions lingering both the crew and the vessel. Revised and upgraded vessel security is mandatory so as to detect and earn precautionary actions in contradiction of such security occurrences. The suitable taxation of the ship security plan (SSP) by a skilled officer is vital in order to search and locate failings, faults, flaws and to improve and boost the existing ship security plan. The management is the one who is in authority to reread and decide if a ship security plan for the vessel is able to be approved, that will similarly embrace any adjustments of old plans. The shipping company has the obligation to train its officer for vessel security officer authorization and the valuation of the vessel security will be conceded onboard by these licensed officers solitary.

The vessel security valuation shall be acknowledged, revised, recognized and engaged by the shipping company. Every vessel has the obligation to convey an official ship security plan approved by the Administration. Company security officer, also known as CSO is a shipping company's selected individual, who is in charge for the vessel security assessment and for the aboard inspection to endorse the growth and execution of the ship security plan according to the ISPS code. In any case if any lack take place, company security officer is the one who is in charge to come up with all the non-conformities and to amend ship security plan according to the shortage. Next there is the ship security plan. Ship Security Plan is a plan that it is located aboard the vessel and it refers the obligations the crew members have at variable security equals and what they should do and what they should not do in any case of a security risk. Ship security plan is under the responsibility of the company security officer to be established aboard the vessel. Following there is the Ship Security Officer also known as SSO. Ship security officer, has the obligation of security of the vessel aboard and it is in charge for the other whole crew member to execute the obligations for ship security according to the ISPS code. Ship security officer is in charge for executing the regular drills for ISPS Code according to ship security plan. Moreover, Ship Security Alert System exists. Various kinds of security utensils can be found on board that contains a metal detector for the inspection of the person who is incoming at the vessel. From July 2004, most of the vessels have put in the Ship Security Alert System also known as SSAS according to ISPS standards which do not sound on the ship but informs the shore authority about the security threat.



## 2.6 challenges of the ISPS Code

Every regulation faces its own tests and challenges. The ISPS code is not an exception and has the some distresses. Human rights are one of the major apprehensions with ISPS code as it straight upsets the seafarers' wellbeing. Shore leave was always the best alternative as a vital stress relief route for the vessel's crew members, and because of many security risks worldwide, many countries are eliminating shore leave for seafarers. Appropriate execution of the ISPS code is an additional worry as not all the crew members have the appropriate skill training at the coast for ship security training. It also effects on the everyday bustle of the crew as it comes with further liabilities of security watch. Executing the security equal on the vessel is also an extra work, which demands a whole lot of time to be completed properly. The port actions are similarly exaggerated when the security equal upswings, leading to the reduction of cargo action. As soon as the security equal is at its peak, the port stopover of the vessel will upsurge as all the cargoes are tested as associated to minor security level (1 & 2), where in only a trickle of cargoes are inspected for security aims. Some ports do not allow any cargo operations under security level 3 while waiting for the equal to be diminished. The three security levels that were referred earlier are the following. Security Level 1 is called Low Risk. This is the level of risk at which port facilities and vessels will usually function. The Security Level 2 is also known as Medium Risk. This security level will smear in conditions where there is a more high risk of a security incident. The Security Level 3, also known as High Risk. This security level will smear in environments where there is an incomparable risk of a security incident.

<https://maritimecyprus.com/2016/10/29/flashback-in-history-terrorist-attack-on-uss-cole-on-12-october-2000PN> [Πρόσβαση 21 September 2019].

<https://www.marineinsight.com/maritime-law/the-isps-code-for-ships-a-quick-guide/> [Πρόσβαση 13 September 2019].

<https://www.findlaw.com.au/articles/1595/the-international-ship-and-port-facility-code-isps.aspx> [Πρόσβαση 6 September 2019].

ABS Academy [Εντυπο πακέτο διαφανειών]

### **3. Requirements the shipping company has to follow**

On chapter number three, it is presented the procedures a shipping company has to follow, along with the ship security plan. Moreover, the internal audit, and the scope are fairly presented in this chapter. The shipping company has to follow some demands. Initially, wherever the certification of an SSP is about to be put through by a Classification Society that did not put through the SSP approval, the Company has the obligation to give, if it is demanded by the Classification Society, a copy of the SSA report and the SSP preceding the audit on board. Also, the shipping company should execute internal audits and evaluations of security activities at least once every twelve (12) months on board each vessel. The shipping company and the vessel are to preserve archives of external security authentications for at least five years. In any case of revisions being made to the security system, the security equipment or the SSP, that are associated with the requirements of ISPS Code must be acquiesced to the Classification Society for examination and endorsement. At the primary setting up of the SSAS, the shipping company shall organize for a ratified Radio Technician to test and issue a statement on the equipment's amenability with the necessities of SOLAS Chapter XI-2. Resulting the initial putting in of the SSAS, the shipping company is the one who is responsible for trying and sustaining the SSAS to satisfy functioning necessities according to the approved SSP; and sustaining on board the SSAS records detailed in ISPS Code.

#### **3.1 Ship Security Plan**

Moving on, the Ship Security Plan Approval follows. The shipping company is the one who is responsible to formulate and acquiesce to the Classification Society a SSP for each vessel. This SSP has to be revised and ratified on behalf of the Administration. Unless if not quantified by the Administration, all deviations to an approved SSP that is related to the amendments of ISPS Code shall be checked and accepted before putting into practice by the Classification Society that agreed the SSP. The SSP and the adjustments are the ones to be conveyed by the SSA from which they were established.

The SSP shall be settled according to the necessities of ISPS Code Part A bearing in mind ISPS Code B/8.1 to B/13.8, and shall be on paper in the working linguistic, or in the working lingoes, of the vessel. If the language, or languages, used is not English, French or Spanish, a conversion into one of these languages shall be comprised. The Classification Society undertaking the approval shall consider at least the version of the SSP written in English, French or Spanish. When revising and accepting a SSP, the auditor shall verify that the Company has bare in mind related security-related direction and best organization practices, containing the latest IMO Circulars relating to piracy, hijacking or armed mugging. When the Classification Society accepts the SSP and any revisions of it, it should recall, as a least, a copy of the letter of approval. The evidence of this approval shall be kept aboard. Marking of SSPs, succeeding initial approval and approval of adjustments, shall be held according to the Classification Societies internal procedures. The Classification Society which supports a revision to an SSP shall govern whether any surplus authentication is essential concerning to its execution. Throughout the documentation period, no Classification Society shall approve revisions to a SSP accepted by alternative Classification Society or an Administration. If the ISPS documentation is moved according to IACS PR 18 and if the gaining society is demanded to support any changes to the SSP by the management company, the gaining Society shall re-approve the entire SSP. Confirmation should be required that the Company Security Officer (CSO) has acknowledged drill according to ISPS Code A/13.1. If proof is not provided by the Company or if there is impartial sign that the CSO has not received such training, the auditor should let the company know that so appropriate remedial engagements can be taken.

## **3.2 The Internal Audit**

### **3.2.1 General Information**

The Internal Audit program takes place once a year at least and its average duration is ten to twelve hours. The definition of ‘audit’ is a process of systematic and independent verification, through the collection of objective evidence, to determine whether the SMS complies with the requirements of the ISM Code and whether the SMS is implemented effectively to achieve the Code’s objectives. The types of audits are the

first party the second party and the third party. The Purpose of the Internal Audit is to verify by collecting information whether the company's SMS goes along with the new or the already existing industry regulations. Also, if the activities that are relatable to safety and pollution are compatible with the regulations. Last but not least the purpose of the internal audit is to check if the system is in place and works effectively. The Internal Audits are very important for quite many reasons. Internal audit constitutes a major factor concerning the effectiveness of a Company's Safety Management System (SMS), but many times even nowadays it causes confusion and prejudice to Ship and Office Personnel. Internal audits give a remarkable relief to Company management. This relief includes, locating and stopping deficiencies which could lead to an incident or an accident, testing internal control, and monitoring compliance with Company's policy and safety procedures. Doing an internal audit procedure provides a stepping stone in the growth of the company and its fleet. It is worth noticing that many masters do not wish to go through the process of the Internal Audit as they consider that it judges their credibility and worthiness.

When the Internal Audit takes place is the system that is being checked not the people. All the results that are written down are based on facts and the only thing that is to be blamed are the procedures.

### **3.3 Auditor Traits**

When an auditor is being chosen to run the procedure he must have some qualified traits. The effective communication is an important skill. The auditor must be able to make the people in the ship feel comfortable with his appearance there. He must show that he is listening to what they are telling him and remember to taking notes. He must have good interviewing techniques. When he is interviewing he must be aware of the educational level of the auditee. For example if he is in the engine room he must speak to the proper language with the engineer. Also, an auditor must observe the environment around him, must be open – minded and his approach must always be based on evidence. The lead auditor, because sometimes there may be more than one auditor, must own exceptional communication and should have if possible prior audit experience. When referring to exceptional communication it means that he must be able to read and understand each person's expressions and he must be able to manage to attract the interest of the people so as they could feel comfortable and talk about any

problem that the vessel has. Moreover, an auditor must be governed by professionalism. He must be polite and calm; he must be familiar with the history of the vessel, the manuals, the policy, the checklist, and the specifications. He must also be fair, be direct and never jump to conclusions easily. When referring not to jump to conclusions easily, it means that what is spoken may not always be true or it may not always be understood correctly. Sometimes the person who speaks with the auditor may want to hide something and the auditor must be able to understand it by the vocal characteristics and delivery (shaking voice). When an audit interview is taking place, the auditor must hear the person who talks to him and not speak more than him/her. Also, taking into consideration the limited time an auditor has available to take an interview he must choose random or sampling some of the people to operate the audit. He cannot audit the whole vessel.

When we search a definition for the word ‘audit’, a good one is that audit is a method of organized and self-determining verification, through the gathering of impartial evidence, to define whether the SMS complies with the necessities of the ISM Code and whether the Safety Management System (SMS) is applied successfully to fulfil the aims of the code. Below there are some explanations about some people and some things that are involved in the internal audit.

### **3.4 People involved in the Internal Audit**

Firstly, there is the auditor. An auditor is a person who is skilled and certified to carry out ISM audits according to the demands of PR10. Then, the lead auditor exists. A lead auditor is responsible for being the leader of the rest auditors. Another condition is the safety management manual. The safety management annual is a record which is casted off to explain and apply the Safety Management System code. Technical deficiency is a condition used in the ISM Code to describe the flaws, the fault, the fiasco in the procedure or a false in vessel’s construction, or vessel’s machines, or its tools and gears. When an auditor is doing an audit, he may observe a failure or dimness inside the vessel that if not improved or fixed as soon as possible, it may lead to a non-conformity situation. The auditor must have unbiased indications and this condition is called observation. Talking about non conformity is a good path to continue with the conditions of the ISM. Non conformity, is when an event or a situation is observed by the auditor, who must have unbiased evidence, that paves the way to a non – execution

of the demands of the Code. Moreover, another condition is Major non conformity. Major non conformity is a detectable eccentricity which leads to a very important and dangerous menace to the safety and the security of the personnel or the vessel or to a severe peril to the environment. When this condition is observed, there must be direct corrective action plan.

### 3.5 Scope

Moving on there is a document called Scope. This paper inaugurates elementary procedures about the behavior of temporary, planned and supplementary audits that are against the ISM Code. Also, the subject of the ISM Code, licenses the shipping companies and the vessels and their succeeding validation. Furthermore, there is a paper called 'ISM Code Certificates'. This paper launches rudimentary processes for the ROs, that should trail if or when possible flaws or disasters are being acknowledged by the Port State Control Officers in the Safety Management System shipboard.

<http://max-ism-code.tripod.com/id2.html> [Πρόσβαση 2 october 2019].

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### 4. Internal Audit Procedures



### Figure 3 Internal Audit Procedures

Source: Desuarnur - <https://desuarnur.com/2017/05/07/ism-code-internal-audit-procedures/>

On chapter four, there is a more detailed presentation that concerns the procedures of the internal audit, step by step. The resolution of the International Safety Management Code (ISM Code) has been to encourage safety nation and ethos for the maritime industry. The ultimate attitude of the ISM Code is the viewpoint of unceasing development. Rendering to IMO, scholarship from coincidences should help to progress safety routine since the happenings can stake the same fundamental causes as damages. Internal audits are important to exhibit the effective operative and unremitting operation of the SMS, both ashore and onboard. The company is required to conduct these internal audits of their shore-side offices and respectively of their vessels to all elements of the ISM Code and of their own individual procedures at least once every 12 months. Although Company audits are also established on random sample the procedures, archives, curative action implemented and confirmed and consultations of personnel ashore and onboard, it would be rational to expect the internal audit to be more complete than the audit performed during external ISM Code certification. Objective indication is compulsory to confirm conformance with the company's internal audit procedures, to establish and validate the effectiveness of the SMS operation, unceasing improvement of the management system and management's pledge to the SMS. Cases of objective evidence found at the office and onboard the vessel could for instance the documented trials for internal audits and evaluations, including condition of skill for internal auditors. Also, there is the certification that internal auditor encounters skill requests, the random sample of corrective action has been taken and the certification of the effectiveness has been completed. Moreover, the timetable of the scheduled internal audits both ashore and onboard the vessels. Last but not least, the copies of internal audit reports and master's management revisions.

The tenacity of this method is to set strategies and rules for directing Internal Audits on the Safety Management System as follows. Firstly, there is the scheduling. An internal audit should be programmed and established by the Safety Management Representative and accepted by the Designated Person Ashore (DPA). It will designate the cautious date of the audit, what element will be audited, what origins of the ISM Code will be lectured, and the appointed auditor(s). The next step is the preparations. Proceeding to the audit, the Safety Management Representative shall synchronize and manage the

schedule for the audit with the allocated auditor(s), with the Director of Ship Operations for the office or with the Master of the vessel to be audited. This harmonization will confirm that the audit does not conflict with functioning promises of the unit being audited. Ordinary forms to record foundational and concluding meeting attendance, interviewee list and a checklist/auditor's notes should be organized comprising all open Corrective Action Reports (CAR). Next on the procedures is the execution. The audit shall be directed with the minimum intermission of commercial. It is planned to authorize the operation of the Safety Management System and its efficiency. Nonconformities and observations, and the evidence for them, shall be interconnected verbally to the auditee as they are recognized and proven. At the closing meeting, the auditor shall show all nonconformities and observations to the Director of Ship Operations or Master as pertinent. Following on the list of procedures there is the Report. The finalized audit checklist and nonconformity reports shall come to be the supporting certification for the Audit Report which shall contain the list of nonconformities by numeral with a short-lived swift. Also, the report should contain all nonconformities and observations which shall definitely refer to the applicable division of the ISM Code and/or SMM. All Nonconformities recognized as a result of an Internal Audit ought to be matter to tracing and follow-up activities. Finally, the audit checklists and audit reports are measured as Safety Management System archives and shall be engaged and eagerly be obtainable for future audits.

When Internal Audit procedures are going to be taken place, some papers must be taken into account in order to the procedure to be completed correctly. Initially there are some certificates that are distributed to the vessel. To begin with there is the Interim SMC, that responds to a vessel that has not been operated again in the past and has no experience of the SMS. Also, there is the SMC. SMC is a documentation that is under the responsibility of the Flag State Government. Following the list, there is a certificate that is called short-term SMC and this one has the role to cover the period until the full-term SMC is delivered. This one is used when the Flag Administration has the authority to deliver a full-term SMC. Moreover, there is the interim SMC. The interim SMC when it is distributed it applies to some cases that concern a vessel in which the management company has changed or it is a newly constructed one. Also, it is delivered to a vessel in which the SOLAS IX smears as mandatory requirements due to navigation area or alteration. The interim SMC also applies to a vessel that its flag has been



changed. The validation period of an Interim SMC is about six months and in special cases and exceptions it may be valid up for twelve months maximum, taking into account that the Flag has provided the permission to do so. The vessel must go under Initial Audit to gain a SMC during the period of validation of the interim SMC. Moving on, there is SMC. A SMC should be delivered to a vessel, which is under the management of a company that has the possession of DOC, or by the Flag Administration or the Office of class NK that it is under the responsibility of the Flag Administration when an initial audit has been completed successfully. When the audit is taking place, the SMS of the shipping company should be in process for at least three months in the shipboard. Also, the internal audits must have been completed too. The validation period of the SMC should be five years from the last operation and an intermediate audit should be done during the second and third anniversary date. Following, there is the renewal audit. This one is operated in the period of three months before the expiration date of the already existing SMC and the time that it is given for the validation of the new SMC should be five years from the expiration date of the already existing SMC. When the Renewal Audit is finalized further than three months before the expiration date of the already standing SMC, the new SMC should be valid from the time of completion of Renewal Audit for an age of five years. A SMC is supposed to be permitted when the Intermediate audit has been completed successfully. The authentic of the SMC is supposed to be located on board and a copy of the SMC should be kept by the shipping company. Moreover, there is the short-term SMC. While the Flag Administration subjects a full-term SMC, a Short-term SMC legal for a period of five months is supposed to be delivered to a vessel on the latter day of the Audit by the Office of Class as a documentation of pleasing completion of an Initial Audit or a Renewal Audit. There are some others certificates concerning the internal audit. Firstly, there is an SMC which concerns a vessel that has a flag of a state which has not been certified class for ISM Certification, or has a flag of a state which is not a contracting government of the SOLAS convention, by the office of class, or vessels that are not having a provision of SOLAS convention. A DOC must be delivered for the shipping company which has the management of the vessels.

## 4.1 certificates

Here, there are certificates that are about extension, revising an entry, invalidation and returning. As mentioned before, the validation of interim SMC is allowed to be prolonged for six more months maximum, taking into account that the flag administration has given the permission to do so, in special cases and exceptions only. If a vessel, during the period of the operation, and when a SMC expires, is not in a port in which it is supposed to be verified, the era of cogency of the SMC may be stretched for no more than three months containing the Flag approval too. Furthermore, there is the revising on an entry on a certificate. When the detail, such as the name of the vessel, which is cited in the SMC, is altered, an additional audit to redraft the SMC is obligatory. Also, it is fair to refer that in case of a change of the company's name or the address, an additional audit to alternate the DOC is vital. Further, a renewal of SMC which has been distributed by Class is demanded. Moving on, there is the invalidation of a DOC. A DOC may become invalid when initially there is proof of an unsettled MNC. Also, when audit fees and expenses have not be provided and paid by the shipping company. Moreover, when corrective actions for NCs are not done according to the arranged plan. When a shipping company has not gone under an annual internal audit within the planned period of time then there is the invalidation of DOC too. Invalidation of DOC appears when modifications of the ISM Code are not done or taken into consideration be the shipping company. Moving forward, there is the invalidation of a SMC. A SMC is considered that it is not valid when improvements of the ISM Code are not done or taken into consideration by the shipping company, or when there is a living proof of an unresolved MNC. Also, a SMC is not considered a valid one, when a shipping company has not done a process of the internal audit during the period of time that has already been scheduled or when corrective actions plan, also known as CAP, for NCs are not given in to or concluded during the time that has been arranged. Moreover, there is an invalidation of a SMC when the vessel is not supported with the trading documentations that are compulsory for her operation or the DOC of the shipping company is not valid. Last on the long list is the Returning of Certificates. A shipping company is demanded to reoccur a Certificate when it has become invalid or has perished, or a shipping company has concluded the management of vessels due to sale or scrap of the vessels. Last but not least, when a new certificate has been delivered due to renewal, reviewed entry and so it goes.

## **4.2 Purposes of Audit**

Purposes of audits are to confirm acquiescence of with the requirements of the ISM Code and over the verification, to provide and encourage shipping companies in accomplishing safety management purposes. The safety management purposes are the uninterrupted upgrading of the safety-management services of personnel ashore and aboard, the establishment of safeguards against all noticed dangers and risks according to valuations. Also, the provision of safe operation in vessel processes and a safe working environment is a purpose of the audit.

## **4.3 Type of shipping company's audit and its technique**

Audits of a shipping company consist of the audit for delivering Interim DOC initially. This should be shown for afresh established shipping company or in count of the vessel type. Secondly there is the Initial Audit. This should be done to create a DOC for a shipping company for the first time. Thirdly, there is the Annual Audit. The annual audit should be directed every year between three months before and after each anniversary day. Furthermore, there is the renewal audit. The renewal audit should be showed within three months before the finishing date of the already standing DOC. Continuing, there is the Additional Audit. The additional audit is supposed to be steered to confirm actual activities are taken for MNC as essential and whenever required.

## **4.4 Type of Shipboard Audit and its Scheduling**

Shipboard Audits consists of the following. Firstly, audit for delivering an Interim SMC. This should be directed to subject an Interim SMC for a vessel that has not functioned or for a vessel in which the flag has been altered. Secondly, there is the Initial Audit. The initial audit is supposed to be created to dispute a SMC for a vessel for the first time. Thirdly, there is the Intermediate Audit. The intermediate audit must be created between the second and third anniversary date which is within the period of twelve months. Following on the list, there is the Renewal Audit. The renewal audit, should be done within three months before the ending date of the already existing SMC. Next there is the Additional Audit. The additional audit should be be shown to verify actual engagements are taken for MNC as essential and whenever required. Internal audits are really important because they are the first look to assess understanding. Also,

it is a way to verify adequacy of implementation, to identify systemic problems. Moving on there is the internal audit program development. Internal audit program development has the purpose to identify the functional areas of the company. Also, it has to identify the processes and activities that are taking place, to develop requirements and function the matrix. Moreover, it must recognize controls; determine safety and/or environmental importance of process or activity. In addition, it must recognize and decide what resources are required. Last but not least it must contain the training of the internal auditor and to establish an internal audit schedule. The internal audit program is the true independence of the audit function when evidenced by the objectivity and impartiality of the audit. It is important to remember that is the system that is being checked not the people, that the evidence written down must be based on facts.

#### **4.5 Audit of Ships**

Audits for the issue or renewal of International Ship Security Certificate (ISSCs) should consist of the following steps. Firstly, there must be a certification that a permitted SSP is on board. Also, confirmation concluded a characteristic model that the security system is being applied efficiently. Moreover, confirmation that all security equipment specified in the SSP conforms to appropriate necessities; a certification that all security tools stated in the SSP, including the ship security alert system (SSAS), is functioning. Moreover, Initial, Intermediate and Renewal audits shall be achieved only under standard operating conditions and when the ship is fully manned in accordance with the Safe Manning

#### **4.6 Certificate.**

The auditor must be able to confirm the effective application of the approved SSP and its documented processes based on unbiased proof gotten by interviews, inspections, review of documents and inspection of the archives. Succeeding the preliminary fixing of the SSAS, the Classification Society may approve the associated requirements in the SSP and validate, by audit and the witnessing of a complete security alert test, the effective operation of those provisions. Ratification that the SSAS complies with the necessities of paragraphs 2 to 4 of SOLAS Chapter XI-2 will be found in the Radio Technician's report. Also, at each successive programmed inspection the auditor shall

examine the records of the testing of the SSAS, identify the SSAS activation points and verify the effective execution of the procedures, instructions and management relating to the SSAS as specified in ISPS Code. Intermediate and renewal audits shall include a review of failures testified resulting prior audits. The auditor shall select a sample of the reported fiascoes and verify that the company is examining, evaluating and determining them effectively and in a timely manner. The auditor has the authority to ask for information from any other Classification Society or, if applicable the Administration, so as to check the exactness of the information delivered by the shipping company. Where the audit of a vessel is to be done by a Classification Society that did not did the SSP approval, the Classification Society may examine the SSP either at, or prior to, the audit on board.

#### **4.7 Failures and Corrective Action Follow-up**

Audit results shall be revised by the auditor(s) so as to decide whether they should be reported as Major Failures, Failures or Observations. At the end of the Audit, the auditor(s) will embrace a meeting with the senior management of the vessel and the individuals responsible for the purposes worried about. The purpose is to present Major Failures, Failures and Observations to the vessel's management in such a way that they will be evidently understood. Failures will be raised against the equivalent obligation of the ISPS Code, the relevant divisions or paragraphs of the SSP and any specific flag State requirements. An ISSC is not to be delivered or improved if a Major Failure exists. Immediate action is demanded to reestablish agreement. The auditor will substantiate the implementation of these measures prior the ship cruises and a timetable for the execution of actions to prevent repetition, is going to be agreed between the shipping company and the auditor. At least one additional audit shall be operated within the period agreed for the verification of operation of the actions to prevent reappearance. Moreover, an ISSC will not be delivered or improved until amenability has been reestablished for all identified failures. In addition, a timetable for the execution of action to avoid repetition may be agreed between the shipping company and the auditor. Further audits may be done as necessary. An ISSC will not be permitted if a Major Failure exists. Immediate action is demanded to restore obedience, thereby permitting the Major Failure to be down-graded. The auditor must prove the enactment of these procedures prior the vessel floats and a schedule for the operation of activities and

movements to prevent reappearance will be fixed between the shipping company and the auditor. At least one extra audit will be carried out within the period arranged for the verification of operation of the actions to prevent repetition. An ISSC may be sanctioned ensuing documentation of a failure, provided that compliance has been returned, or a schedule has been agreed between the shipping company and the auditor for the completion of corrective action to reestablish acquiescence and to prevent repetition. Additional audits may be carried out as needed.

#### **4.8 Follow up action for MNCs (Major Non Conformities)**

The first step is the determination of MNCs. When an MNC is recognized, the Auditor hands over form MNC with its unbiased evidences to the shipping company's representative or the Master as a transitional report. The Auditor will clarify the MNC and follow-up procedures. After that, the company must directly take corrective action for the lacks and deficiencies which the MNC is based, such as the maintenances of broken equipment. The Company has the responsibility to propose the direct corrective action to the Auditor to downgrade it to DNC. The Auditor will analyze the idea and claim deviations if it is required. In order to downgrade to DNC, it is essential to take actions to remove at least the severe intimidations to personnel and/or vessel's safety, and/or stern threats to the environment. After authorization of the direct corrective action, the Auditor designates the activities taken and DNC(s) on the form MNC and shows it to the shipping company's representative. The paper is signed by the Auditor and the company's representative. In case a MNC is found, an Additional Audit to confirm whether actual activities are taken is compulsory within three months from the date of the audit. If the additional audit has not been completed within the settled time dated, maximum three months, the DOC/SMC shall be removed with reporting to the flag administration. In addition, in case a MNC which is triggered by the shipping company's SMS failure is elevated during shipboard audit, an Additional Company Audit may be mandatory in addition to the additional shipboard audit, if the Auditor estimates it is vital. The Auditor prepares a Form MNC and his associating objective suggestions, and hand it to the shipping company's representative or Master at the pre-closing meeting together with a Form CAP.

The company is demanded to draw up a corrective action plan for the DNC (downgraded non conformity) with a timetable not beyond three months from the last

date of the audit and submit form CAP to the Auditor within two weeks from the last day of the audit. The Auditor analyses the suggested CAP, to see if it is delightful or not and ask from the shipping company to reread it where deliberated indispensable. In this reverence, the Auditor confirms that the plan comprehends the root-cause investigation and the implementation of corrective actions containing actions to prevent repetition. Where the CAP is agreed as acceptable, the Auditor sends the receipt to the shipping company. The application for the "Additional Audit for DNC" must be acquiesced to the office in cases of company Audit, or to any Office, having authority over the port at which the company strategies to undertake the Audit, in cases of Shipboard Audit. The application must be convoyed by a copy of each Form of MNC. The purpose of the follow-up audit is to validate that the curative actions taken to prevent repetition of the results have been executed in line with the SMS and to confirm their usefulness. When the completion of actual Corrective Actions is not detected, DOC/SMC is supposed to be annulled.

#### **4.9 Follow-up action for NCs**

When NCs are found, an auditor prepares a form for a NCN and its supporting objective evidences, and hand it to the Company's representative or the Master at the pre-closing meeting together with a form of the CAP. The Auditor then explains the NC and the follow-up procedures.

The company is requested to create an educative action plan for the DNC with a schedule not more than three months from the last date of the audit and submit the form CAP to the Auditor within two weeks from the last date of the audit. The auditor analyses the suggested CAP to check if it is delightful or not and ask from the shipping company to reviewed it where measured necessary. In this respect, the auditor checks that the plan comprehends the root-cause examination and the operation of corrective actions containing measures to prevent repetition. Where the CAP is agreed as suitable, the auditor will send the receipt to the shipping company. The efficiency of the corrective actions for NCs, containing those raised at Shipboard Audit, will be shown by the auditor at the next company audit.

[https://www.researchgate.net/publication/291295131\\_AUDITING\\_IN\\_THE\\_MARITIME\\_INDUSTRY\\_A\\_CASE\\_STUDY\\_OF\\_THE\\_OFFSHORE\\_SUPPORT\\_VESSEL\\_SEGMENT](https://www.researchgate.net/publication/291295131_AUDITING_IN_THE_MARITIME_INDUSTRY_A_CASE_STUDY_OF_THE_OFFSHORE_SUPPORT_VESSEL_SEGMENT) [Πρόσβαση 21 September 2019].

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## **5. DPA**

On chapter five of this thesis, it is presented the role of the DPA in the shipping company along with some paragraphs of the ISM Code that concern DPA's role. The Designated Person Ashore (DPA) is the basis to run the assembly and funding for an efficient and effective Safety Management System onboard a vessel. Required by ISM Code for all commercial vessels over 500gt, the DPA is especially designated to guarantee a consistent and dependable joining between the company and the crew members and to manage the safe process of the vessel.

As delineated in the ISM Code there are three main duties of a DPA. Firstly, the shipping company will designate a person who is going to be in charge for checking and observing the safe and proficient procedure of each vessel with specific regard to the safety and pollution prevention features. Especially, the designated person should take such steps as are vital and essential to guarantee amenability with the company safety management system on the basis of which the Document of Compliance was distributed and certify that appropriate establishment is made for each vessel to be so crewed, fortified and preserved that it is fit to function according to the safety management system and with statutory necessities. Also, the shipping company shall ensure that the designated person is delivered with adequate ability and assets and that he has proper awareness and necessary involvement of the operation of vessels at sea and in port. The DPA is meant to be an important communication connection among the vessel and shore, but it is up to the shipping company to choose how they are to certify that the DPA provides this connection. This new part, DPA, should be a new stout connection in order to rally safety. The DPA should have contact to the highest level of management, display the operation of the SMS and ensure it is adequately resourced, and guarantee that suitable properties and shore-based support are applied, as required by the ISM Code. The DPA must have the ability to be appropriate, capable



and qualified in the vessel operations or management systems and be completely familiar with the shipping company's safety and environmental protection regulations and Safety Management System. It is vital that they have the freedom and ability to report to the highest level of management. There is no doubt that if a DPA should be able to achieve this, it is projected by the ISM Code; he/she must have a solid maritime experience. This is one of the strongest ways the DPA will be able to execute his/her responsibility. It is in some way difficult to describe what is meant by strong maritime background. A DPA will have to go on board the company's vessels, and execute internal audits as per ISM demands. Procedures and systems for performing internal audit on board are in principle no different from undertaking the similar object in a shore-based organization. The DPA has the role to provide a connection among the shipping company and the crew members onboard; he/she is a person ashore having straight admission to the highest level of management. Referring to highest management, it is included the decisional equal in particular at the financial level and when referring about the people on board, it is about all the crew members because if not, the code would have said the vessel or the captain.

### **5.1 Duty of the DPA**

The duty and ability of the designated person ashore should include checking, observing the safety and pollution avoidance features of the process of every vessel. Easily overlooked, this obligation of the Designated Person is not humble to guarantee. In fact, how, from being ashore, control the processes of every vessel regarding safety and environmental protection is not an easy job.

There is a remarkable link worldwide, that it is implicit and functional. It is an interrogation of confirming and certifying a trustworthy joining amongst the highest management level and the people on board of every vessel.

The relations between the masters and the top management generally happen. For minor shipping companies, the problem does not arise. The General Manager is always nearby to his vessels which are every now and then his own belongings. For many people, conceivably, nevertheless, nowadays a master can always, either via mail or e mail or mobile phone, communicate nonstop with the General Manager. So, the role of the DPA may be considered useless. Usually, the other officers on board have everyday relations with the people who are in charge ashore, such as the Chief engineer with the Technical

Superintendent, the Chief Officer with the Safety Officer, or the Purser with the Head of Catering department and so it goes. The rest of the crew members have resources of communication with the Marine Superintendent or the Management ashore through their heads of department, their representatives on board who can be a trade-union or safety representative, safety committee, if they occur.

It is significantly intolerable to certify the monitoring of safety of the operations of every vessel without having on each vessel a person to do it! Undeniably the DPA can warrant part of this monitoring through visits and inspections on board throughout calls or trips, the follow-up of shipboard recordings as safety drills reports, acquaintance footages, maintenance and periodic tests of all vessel's equipment, safety and training meetings, orders for maintenances or standby parts, captains reviews and of course the internal audits.

Truly, nothing is better than control on the plug, during the procedures. The need of a representative of the designated person onboard is vital. The captain is thus the natural form of representation of the designated person onboard. The responsibilities of unceasing monitoring and especially of remote monitoring for the DPA require obviously an excellent knowledge of the operations to be supervised. The dealings between the DPA and the Captain are thus advantaged relations matching to the § 4 of the ISM Code.

### **5.3 Paragraph 4 of the ISM Code**

Crucial to the Designated Person's (DP's) skill to satisfy the necessities of this paragraph is the straight admission he or she must have to the highest levels of the Company's management. The auditor must be fulfilled not only that such access happens, but also that the DPA has the ability to practice it excellently in guaranteeing that adequate resources and shore-based support are applied. The Code requires neither the credentials the DPA should have nor the position he or she should inhabit in the Company's organization. Nonetheless, in practice, if the DPA is to implement any impact in the Company's decision-making processes, then he or she must be given the ability to do so and must have the particular and skilled qualities that give him/her the required bulk in the struggle for occasional assets.

Straight entrance to the company's senior management may be lawfully recognized in organization charts, job explanations or other papers in which establishments and errands are demarcated. Proof that the entrée is existent and operational may be found in, for example, humdrum and ad hoc information, assorted communication, minutes of management meetings in which the DPA contributes, and actions ascending. This is especially important given the anticipation that the courts will adopt (in the event of an accident and based on the requirement for straight access) that the company's management knew what the DPA knew. In order to be able to display the safety and pollution/prevention aspects of the process of each vessel, the DPA must have acquaintance and understanding of shipboard procedures, and must be thoroughly accustomed with the company's system and its certification. Evidence of experiences, experience and training should be available to demonstrate the DPA's proficiency.

The observing itself and the provision of a connection among the vessel and the shore-based association may embrace actions such as vessel visits, the review and analysis of reports of accidents, hazardous incidences and non-conformances, internal audit reports, inspection reports, the minutes of shipboard safety and management meetings, and reports of drills and exercises. All such material should be properly abridged and reported to those who are responsible for the areas troubled.

It is generally understood that the DPA must be made accountable for the entire organization of the management system certification, for the planning and conduct of internal audits, and must act as the solitary outlet for all contacts between the vessel's staff and the organization ashore. This is not the case. It is enhanced to contemplate of the DPA as the person who is responsible for certifying that such methods are in place and operating as required, a role that is more possible to be actual when divided from the practical enactment. The DPA's role is often shared with others such as Technical Superintendent or Operations Manager, and the auditor should be aware of the possibility of a heavy assignment and other responsibilities having a negative effect on the position's effectiveness. Struggles of interest may also stand up. For example, a DPA who would be quarreling for disbursement on safety-related items may also be the manager who reins the corresponding modest. The expression of several of the Code's requirements is based on the hypothesis that, in the companies to which it applies, there will be a parting of roles and responsibilities that is unviable in single-

ship, owner-master operations. In particular, the DP is stated to be a shore-based position, and consequently diverse from that of the master.

In order accurately to assess the administration of owner-master companies, the auditor must recognize that such parting will not always be possible. There are two tactics that such companies may adopt to ensure compliance with the Code's requirements. Firstly, to hire external outworkers to accomplish the role of designated person or secondly to allocate two or more roles to the same individual. Whatsoever resolutions the company may choose, the auditor must be concerned with ensuring that operative and directorial controls are effective, rather than with trying to categorize the executive assembly implied by the wording of the Code. For instance, try to question whether operative valuations of the management system are carried out, and whether its insufficiencies recognized, investigated and adjusted, even though the entire practice may be run by the master. The owner-master could exploit as the DPA provided the fact that he/she can establish that the safety and effluence hindrance aspects of the operation of his/hers vessel are being supervised effectually. As the owner, he is the highest level of management; he is responsible for the submission of adequate properties, and may confirm adequate shore-based support by, for instance, launching infrastructures and emergency provisions with agents or other third parties. Where the firm has chosen to employ outside independents, a number of additional factors need to be considered. One factor is the accurate nature of the promised connection with the independent, as well as any compulsions forced on the company. Another factor is the sources on which the choice of outworker was made.

#### **5.4 ISM Code – paragraph 3.3**

The company is in charge for guaranteeing that satisfactory resources and shore-based support are delivered to empower the designated person or persons to carry out their purposes. The designated person(s) may lawfully oblige the top management to provide properties, when considered essential to carry out their functions. The top management is responsible for estimating the application and to choose accordingly. Also, the company top management is the one to state that suitable possessions and shore-based provision will be delivered at all times, and implement this as its policy. The company is responsible to develop actions for defining the possessions needed for maintaining the functioning safety of the fleet. The assets may be defined as personnel, training,

drills, delivering vessels with enough spare parts and stores. The company is in charge to carry out valuations to ensure that shore-based maintenance is provided onboard.

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## **6. Conclusion**

The aim of this thesis was to present the procedures of the Internal Audit and the role of the DPA in the shipping company. It was always the human kind that created conflicts, severe and fatal accidents and was always the human kind that tried its best by creating laws and regulations to ensure the protection and safety for both humans and the environment. The incident in USS Cole and many other led to the creation of the ISPS Code. ISM Code has some very important regulations for the harmonic operation of the vessel and the company and both vessel and the shipping company should follow them. The procedures of the internal audit are also very important and essential because they work as prevention to the sanctions that may be able to be used if an external audit happens. The auditor must be well trained and qualified and let the auditee speak so he or she can understand every possible case and write down the evidence. DPA is introduced as a person designated by the ISM code, the SOLAS Convention, as a plug of association between internal controls, reviews, checks and SMS. His or hers actions are restricted and inadequate in terms of specialist and administration and do not encompass to accessing and backing, then his/hers judgements may struggle with the master's capability to accomplish daily tasks safety and risk prevention and emergency circumstances. The risk of struggle between the DPA's power and the master's is augmented since, although he/she is given noteworthy accountabilities, there are no compulsory procedures on the lowest necessities for the

level of drill and practice of the DPA, while compulsory ethics spread on to training and Master's involvement is very extraordinary. The creation of this thesis had many obstacles but in the end it was completed successfully.

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