# Towards effective implementation of the ISPS Code onboard ships

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#### **Abstract**

The International Maritime Organization (IMO) has adopted a new set of security measures in December 2002, which include amending the International Convention for the Safety of Life at Sea (SOLAS) and introducing the International Ship and Port Facility Security Code (ISPS Code), which imposes responsibilities on governments, shipping companies and port authorities to enhance the security of ships and port facilities.

Both the ISPS Code and the IMO Model Course 3.19 require that the Ship Security Officer (SSO) and shipboard personnel who have specific security duties have specific security knowledge and receive training in a number of security tasks. The present paper is discussing some of the vital factors, which may restrain the effective implementation of the ISPS Code onboard ships.

The instructors of Maritime Education and Training (MET) may find difficulty in performing a number of training requirements. As well, using non-maritime instructor may not be practical. MET instructors may possibly require additional security training in security organization, so as to be able to deliver valid, reliable and practical ship security training, in order to meet the preset training objectives.

IMO Resolution A.955 (23) recommends that member States should review their manning regulations, in order to include the additional security duties, and to recognize the additional shipboard duties, which have to be performed by the SSO and the ship's crew as required by ISPS Code.

Important questions which raise themselves now are: how the additional security duties could be performed efficiently, in the same time using the same number of crew. Moreover, are member states willing to amend their manning legislations, considering other commercial and economical factors?

Recognizing, the similarity between the ISPS Code and the International Safety Management (ISM) Code in many areas, security and safety managements must integrate, in order to reduce the workload on the ship's crew, considering that the consequences of security breaches and accidents could be the same.

Keywords: Maritime safety, maritime security, safe manning, ISPS Code, ISM Code, MET instructors, security training, security implementation, maritime administrations.

#### 1. Introduction

IMO has adopted the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW 78/95) in order to enhance the maritime safety and environmental protection through improving the performance of the human element. The Convention had created roles for the administration, MET institutions and shipping companies in the implementation process of the convention, in order to establish global minimum standards for seafarer's competency according to the provisions of the convention.

Following the devastating September 11, 2001 attacks on USA, IMO has adopted comprehensive security regime for the international shipping industry. Security measures include amendments to SOLAS convention and the introduction of the ISPS Code.

The Code consists of two parts. Part A is mandatory. It contains detailed security related requirements for governments, port authorities and shipping companies. Part B contains a serious of guidelines about how to meet these requirements. Furthermore, the conference adopted a number of resolutions, in order to facilitate the implementation and the application of those security measures to ships and port facilities.

The ISPS Code requires a number of functional security requirements for ships and port facilities; in addition, ships will be subject to the processes of survey, verification, certification and control measures, in order to ensure their compliance with the provisions of the Code. Moreover, shipping companies will be required to designate Company Security Officer (CSO).

The training requirements of ISPS Code are included in section 13; however, the Code embodies a number of training requirements in other sections Ketchum [1].

## 2. MET systems and the security training requirements

The IMO sub-Committee on Standards of Training and Watchkeeing (STW) has endorsed draft amendment to STCW convention. They require the introduction of new STCW regulation VI/5, new STCW Code section A-VI/5 and section B-VI/5. The proposed amendments were introduced to set the standards for the minimum mandatory training and certification of SSO.

The STCW convention article 1(2) [2] provides that," The parties undertake to promulgate all law, decrees, orders, and regulations and to take all other steps which may be necessary to give the convention full and complete effect." In other words, the maritime administrations of the member States are responsible for the implementation of the security training requirements as required by the ISPS Code and STCW convention.

The convention also requires the administrations to ensure the qualifications of the instructors, supervisors and assessors for the type and level of training or assessment involved Morrison [3].

The trend in the MET systems has been for MET institutions to provide all required training for seafarers after been approved by the administration.

However, barely any administration applies any check or confirms the ability of an MET institution of providing newly introduced training programme; possibly, one of the reasons is the lack of the sufficient technical expertise to perform such control in some administrations.

In addition to the four columns of STCW Code, which specify the minimum standards of a competence, IMO model courses and IMO instruments, such as the Conventions, Codes, Guidelines, are usually the main foundations for developing a curriculum.

Generally, MET instructors are ex-seafarers; however, many of them are holders of academic degrees. Nevertheless, most of MET institutions have implemented many programmes to enhance the pedagogical skills of their instructors to fulfil the requirements of the STCW convention. In addition, the MET course at the World Maritime University (WMU) was established to assist the maritime instructors to better understand the skills of effective teaching.

Based on our knowledge of the field of experience and qualifications of the MET instructors, the question raises itself now, are the MET instructors capable of providing valid, reliable as well as practical training for all the security training requirements, as specified in the ISPS Code and the IMO model course?

However, using non maritime instructors with security backgrounds may not be practical, bearing in mind that, they may not be able to provide realistic training, due to their lack of knowledge about ships layouts, designs and tasks related to the ships operational matters. Moreover, the SSO is a seafarer as considered by STW in its 35<sup>th</sup> session and not security personnel.

Conceivably, MET instructors may require additional security training in a specialized security organization, such as coastguard academies, police academies or naval academies to be able to deliver valid, reliable and practical ship security training, in order to meet a number of the security training objectives.

# 3. Maritime security and safe manning of ships

IMO resolution A.890 (21) defines the principles of safe manning of ships to ensure the safe operations and pollution prevention from ships, which SOLAS Convention applies. The resolution specifies the factors which shall be taken into account in determine the minimum safe manning level of ships, and provide guidelines of applying the principles of safe manning. Moreover the resolution lays down the responsibilities of both the administrations and shipping companies in manning their ships.

Resolution A.955 (23) adds the shipboard security duties to the factors to be considered in determining minimum safe manning level of ships. Flag States are required to take into account such requirements and issue the required documents of minimum safe manning to the ships entitle to fly their flags; in the same way, ISM Code requires companies to ensure that each ship is manned according to national and international requirements.

On the other hand, in order to ensure efficient and practical security measures applied onboard ships, shipping companies should embody the required shipboard security duties, as required by ISPS Code, in the routine shipboard operations.

Conceivably, Ship Security Assessment (SSA) is the best event to discover the necessary security measures required for the ship, as SSA is the cornerstone in preparing the Ship Security Plan (SSP) Mahoney [4].

However, ships are required to act against different security levels, for example security level one requires certain activates such as, "Controlling access to the ship", "Monitoring of deck areas and areas surrounding the ship", "Controlling the embarkation of persons and their effects". Such activities could be achievable with the same number of crew, as it could be integrated with the requirements of other regulations and the routine shipboard operations.

Nevertheless, additional protective measures shall be implemented if the security level is raised to level two, part (B) of the ISPS Code provide guidance in implementing a range of security measures required by the SSP at every security level.

For instance, a number of security measures could be carried out to protect the access to the ship, when security level two is declared such as, "Assigning additional personnel to patrol deck areas during silent hours to deter unauthorized access", "Increasing the frequency and detail of searches of persons, personal effects, and vehicles being embarked or loaded onto the ship"," Establishing a restricted area on the shore-side of the ship, in close co-operation with the port facility", Deterring waterside access to the ship, including, for example, in liaison with the port facility, provision of boat patrols".

The questions which raise themselves now, are whether those additional security duties could be achieved by using the same number of crew onboard? Are most of the flag States willing to increase their minimum manning level taking into account those additional security duties? Recognizing that, the criteria in obtaining the minimum safe manning of ships differs from one State to another and not harmonized, considering many factors include national, social, economical and commercial factors, in addition to the IMO principles of safe manning.

Taking into consideration that, ISPS Code is just beginning its implementation onboard ships, and many of its pros and cons will reveal only after certain period of time. However, the international maritime community, represented in the IMO must begin to establish more effective instruments to ensure that the minimum manning levels onboard ships complies with the newly introduced maritime security requirements, in addition to other safety and operational requirements.

# **4.** Incorporating maritime security into safety management system

IMO resolution A.741 (18) has adopted the ISM Code for the purpose of safe operations of ships and for pollution prevention by providing systematic

approach to control safety and quality management for shipping companies and onboard ships, in the form of developing, implementing and maintaining a Safety Management System (SMS).

Both ISM and ISPS Codes aim to establish systems for safe management and secure operations onboard ships. However, there is a similarity in the implementation process of both of them including, the designation of CSO in ISPS Code verses the Designated Person Ashore (DPA) in ISM Code, the requirements of defining and emphasizing the authority of the master, as well as, the requirements of training and familiarization of the personnel of the related tasks and duties to be performed under the requirements of the Codes.

Furthermore, establishing Safety Management Manual (SMM) to describe how to implement the safety management system including the procedures and plans for the safety of critical ship operations are required in the ISM Code versus SSP in the ISPS Code.

Moreover, both Codes are similar in many other areas such as, each Code covers designated ship and shore staff, emergency preparedness, drills and training, documented procedures, checklists, exercises, record-keeping, internal and external audits, maintenance, and others. In addition, both Codes implement a similar system of verification, control and certification, including the duration and validity of the certificates.

ISM and ISPS Codes, among other regulations, have increased the administrative work loads on ship's officers. This has created excessive workload, which resulted in early retirement of many seafarers. It has created a global shortage in ship officers; as, the cost of training new officers is high and time consuming. Moreover, ship officers spend more time in doing paper work than supervising the routine ship board operations, such as cargo, maintenance and navigation.

The consequences of security breaches and accidents could be the same, security and safety managements have to incorporate to provide practical implementations for the security requirements onboard ships. Harmonizing ISM and ISPS procedures makes practical and economic sense, as the two Codes have a great deal in common. However, the confidentiality issue of the security information has to be considered in performing such harmonization.

The researchers believe that, there should be harmonization between the procedures of the two codes. This has been applied in the Liberian administration [5] by harmonizing both the ISPS and ISM audits. The shipping companies are allowed to incorporate the shipboard security requirements into the Company's Safety Management System (SMS). Moreover, the Cayman Islands administration [6] has harmonized the verifications of both the Safety Management Certificate (SMC) and the International Ship Security Certificate (ISSC).

Certainly, more maritime administrations as well as shipping companies will realize the benefits of incorporating the maritime security requirements into a broad management system including both safety and security issues.

### 5. Conclusions

In order to improve the implementation of the requirements of the ISPS code onboard ships and to avoid some of the difficulties, which may hold back its effectiveness, the researchers recommend the following conclusions:

- 1. In order to ensure the validity, reliability as well as practicability of the security training provided by MET institutions, keeping into consideration that, MET instructors are not specialized in maritime security matters. Maritime administrations should ensure that MET institutions provide practical and valid security training.
- 2. The present manning levels onboard many ships will impede the possibility of performing the required security measures effectively. Flag States are required to review and amend their manning legislation to ensure the effective and practical performance of the security measures among other shipboard operations. IMO is required to establish more effective minimum safe manning instrument to assist Flag States in doing so.
- 3. Incorporating the maritime security requirements into the safety management system is necessary; in order to ensure the effective implementation of the security measures and to reduce the work load onboard ships.

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