

# **Including ISPS requirements in the MET scheme of the Arab Academy for Science, Technology and Maritime Transport through its Regional Maritime Security Institute**

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## **Abstract**

MET is generally defined as the process which provides education and training for seafarers at operational and management levels in the shipping industry. The continuous development of MET in AAST-MT depends on the ability to implement the requirements of international conventions and codes, such as the ISPS Code, and the capability of providing the necessary type of training to various cultures. The comprehensive new regulatory regime, adopted in a Diplomatic Conference on Maritime Security at the end of 2002, describes in detail what shipping companies, port authorities, ships' crews, and others should do in order to minimize any threat to the shipping industry. The Egyptian Government, represented by its Maritime Administration, has issued a national decree to establish the Regional Institute for Maritime Security. AAST-MT assumed responsibility to establish this institute in order to serve Egypt and regional countries in implementing the requirements of the ISPS code.

*Keywords: MET, enhance maritime security, AAST-MT, examination affairs, Regional Maritime Security Institute, implementation the requirements of ISPS Code.*

## **1 Introduction**

MET is the process that covers matters relating to aspects of maritime and marine affairs such as nautical sciences, marine safety, environment protection, and maritime security. It is the wider aggregation of education and training

systems in general. The questions raised are: how can a process be introduced which will meet the requirements of the new regulations in international conventions, in particular the new chapter XI-2 of SOLAS “Special Measures to Enhance Maritime Security, ISPS Code” on the developing of the skills of seafarers, and how to improve and intensify the ability of quickly adapting to diverse demands of the maritime industry.

Safety, security, efficiency of ships and clean environment of oceans require not only advanced technology of ships and equipment, but also an adequate level of manning and operational procedures.

AAST-MT with its Maritime sector is responsible for maritime education and training. All sectors are necessary to interface with the shipping industries and with IMO requirements in order to obtain the latest developments of International Conventions, Codes, and Resolutions as well as national requirements.

The present question is “what are the requirements necessary to achieve effective development of MET in the Academy and its maritime sector to meet the continuously increasing requirements in accordance with the amendments to International Conventions?”

AAST-MT has given high priority to the development of MET and to the development of human resources by aiming at the highest quality of MET on all levels. One of the subjects given a high priority has been the establishment of the Examination Affairs and its departments, because the most important factor affecting the improvement and standard of Maritime Security regimes is the human resources factor. The Egyptian Maritime Administration has issued a national decree to establish the Regional Institute for Maritime Security. AAST-MT assumed responsibility for establishing this Institute to implement the requirements of the ISPS Code.

## **2 Human resources**

Since man first set sail accidents at sea have been increasing, but now we face a new type of incident: terrorist attacks. As the 21<sup>st</sup> century started, we expected to witness radical changes in the proficiency required by seafarers.

The influence of the human element is very high and is a very important factor in the process of carrying out the various functions of shipping companies. It plays the most crucial role in almost all operations at sea and ashore.

Education and professional training, as well as development of performance should be given due consideration. The proper implementation of the International Conventions will go a long way towards achieving these objectives, and a very significant point is the need for expedient crew training for tasks, which are very specialized and complicated. Emphasis should be placed on the important role played by those provide this training and we must ensure that they are highly qualified, well motivated and provided with a work environment that helps improve their skills and encourages them in carrying out their professional responsibilities.

### **3 SOLAS, 1974 Convention and ISPS Code**

The SOLAS in its successive forms is generally regarded as the most important of all international conventions concerning the safety of merchant ships.

The end of 2002 saw the adoption at a Diplomatic Conference of a comprehensive new regulatory regime in the amendments to the SOLAS Convention and the related International Ship and Port Facility Security Code “ISPS”. The ISPS Code became mandatory on July 1, 2004.

The amendments in SOLAS, 74 that aimed at enhancing maritime security on board ships and at ship/port interface area created a new SOLAS chapter dealing specifically with maritime security. This in turn, contains the mandatory requirement for ships to comply with the new International Ship and Port facility Security Code “ISPS Code”.

### **4 Security culture**

The ISPS code requires governments to collate and evaluate information regarding security threats and exchange such information with other contracting governments. Shipboard and port facility personnel need to be aware of security threats and report security concerns to the proper authorities for their evaluation. Governments need to provide security related guidelines for ships and port facilities. Therefore, we are actually talking about creating an entirely new culture amongst those involved in the day-to-day operation of shipping and port industries.

#### **4.1 How to create maritime security culture**

Maritime security culture is a new term, and it can become a reality although the implementation is not yet fully introduced. Two important factors can assist in cultural development within a community: time and the environment.

Maritime security culture is the way in which the maritime community behaves in different maritime sectors such as ships, ports, shipping companies as well as maritime institutes to prevent hazards to people, ships and cargo, ports, and shipping companies.

The concept of international maritime security comprises certain security standards which could be applied everywhere despite cultural differences. Uniform maritime education and training is the key to international maritime security culture. As the foundation of any culture is the human element, the provision of basic education and training is a prerequisite in preparing personnel.

The Regional Maritime Security Institute of AAST-MT is involved in this new system; the staff do all they can to ensure that the trainees acquire the concepts of security culture, and that the graduates return to key maritime positions where they are able to act as catalysts in promoting security culture. There is a need to promote security culture that requires the cooperation of security officers at sea and ashore.

Security culture must deal with the concept of the collaboration between management and workforce in the broader context. Safety and security of ships and ports as well as ship's personnel are surely the most important considerations. In 2002, IMO showed its changing priorities by adopting a new mission declaration, an evolution from the theme of "Safer Shipping, Cleaner Ocean" to "Safe, Secure, and Efficient Shipping on Clean Ocean". In essence, safety and security have the highest of priorities.

## **5 Arab Academy for Science and Technology and Maritime Transport "AAST-MT"**

The AAST-MT was established in 1972 under the name of Arab Maritime Transport Academy (AMTA) in Alexandria, Egypt. Since that time, AMTA operated as a regional UNDP project, offering MET to qualify seafarers in the streams of navigation, marine engineering, radio officers, and commercial studies (UNCTAD) and seaman training.

Since its establishment, the Academy has had a visionary open-door policy approach, due to the international nature of the Maritime Transport industry as stipulated and enforced by the conventions and regulations issued by IMO. Because of the Academy's expansion in educational, training and research activities as well as engineering and management, the Economic and Social Council of the Arab league agreed to change the name to Arab Academy for Science and Technology and Maritime Transport.

### **5.1 AAST-MT from regional to global**

The Academy is an active member in the Association of Arab universities, and has excellent relations with international specialized organizations, universities and research centres. After implementing and developing its Quality Assurance system covering programmes of studies in 1999, the Academy attained ISO 9001 from one of the highest certification bodies' world wide, DNV

The Academy won the Trophy of Sea Trade Awards in the Innovations category in 1999. The Academy places great expectations in its partnership with IMO to bridge the enormous gap that exists between developing and developed countries in the field of education training, quality of seafarers, technological aspects of ships and equipment implementation of International conventions and resolutions, port administrations and logistics. Let us all join forces to ensure safer seas and cleaner oceans as well as a secure environment and make this world a better place for the human race.

The Academy's excellent record in providing maritime education and training resulted in the signing of the "MOU" with IMO in October 2001, which was subsequently renewed for a further two years in October 2003. As a result, the scope of the MOU has extended thus ensuring the presence of the IMO in the region through the services provided by the Academy.

## 5.2 Examination affairs

### 5.2.1 Introduction

In view of the importance of examinations and their role in ensuring quality of education and training, and based on the importance of the whole examination process, since its inception in 1972 the Academy has worked diligently towards improving examination regulations. There is collaboration with maritime education institutes worldwide and specialized reputable consultants in order to keep abreast of technological advances in the profession. The Examination sector, which includes eight departments, all of which are responsible, for supporting the process of MET, these departments are:

1. Maritime Transport Examination Centre for Management, Operational, and Support Levels.
2. Regional Examination Centre for Management, Operational, and Support Levels.
3. Port State Control Unit.
4. Regional Maritime Security Institute:  
In view of the importance of applying the ISPS Code as quickly as possible, the Academy acted at the international level in coordination with the Ministry of Transport of the Arab Republic of Egypt through supporting the Maritime Security Fund of the International Maritime Organization with a grant of US\$ 15000. It merits mentioning that Egypt is the second country in the world after Germany to provide this support at the international level, which drove the Organization to support the Academy in the establishment of “The Regional Maritime Security Institute”. The maritime teaching staff has excellent academic and industrial backgrounds and many have published papers on their specialization. The Academy is proud to have links with various industries on a national and international level, provide outstanding work experience opportunities.
5. Global Maritime Distress and Safety System (GMDSS).
6. Fisheries competency examination.
7. The activities of the International Maritime Organization “IMO”:
  - a. the Unit responsible for following up the meeting and Conventions of IMO;
  - b. the Contact Office in Charge of the MOU signed with IMO.
8. Information centre.

## 6 The implementation of the ISPS Code in the Arab Republic of Egypt and other countries in the region

### 6.1 Introduction and the role of the Academy

After the 11<sup>th</sup> of September 2001 disaster in the United State of America, the IMO Secretary General emphasized the need to review the measures already

adopted by IMO to combat acts of violence and crime at sea. The international community began confronting terrorism after those events.

Egypt has been one of the first countries, which accepted and signed the December 2002 amendments to the SOLAS Convention, and financially contributed in the enforcement of the implementation process. The Egyptian Maritime Authority has taken several steps to meet its international commitments, and to implement the provisions of the new chapter XI-2 amended to the SOLAS Convention. Within this context, and in view of the importance of applying the Code as quickly as possible, the Academy acted at the international level in coordination with the Ministry of Transport of the Arab Republic of Egypt through supporting the Maritime Security Fund of IMO with a grant of US \$ 15000.

## 6.2 The implementation stage

The Egyptian Government has taken several steps to implement the ISPS Code, summarized as follows:

July 2003: Establishing the Regional Maritime Security Institute in “AAST-MT” Serve Egypt and all countries in the Region for assisting in the implementation process of the Code.

Conduct security assessments and setting up security plans, in addition to holding training sessions for personnel serving at sea, in shipping companies, and in port facilities in line with IMO Maritime Security Model Courses.

August 2003: The Minister of Transport issued decree No. 392 in 2003 pertaining to the establishment and concerning the formation of the Major Committee for Maritime Security, which set out the general framework of implementing the Code. The Major Maritime Security Committee headed by the Head of Maritime Transport Sector in order to effect coordination with concerned bodies, included but not limited to the following:

Port Authorities of Egypt: Alexandria Port Authority, Damietta Port Authority, Port Said Authority, and Red Sea Port Authority.

Ministry of Interior Sector in charge of port security: Port Police.

The Sector of shipping Companies operating ships hoisting the Egyptian Flag.

Education and Training Institutes exemplified by the Maritime Security Institute of AAST-MT, which is the only specialized and recognized maritime institute in Egypt.

Ships: Establishing a sub committee namely “The Sub Committee for Shipping Companies and Ships” to implement the provisions of the ISPS Code with respect to shipping companies and the ships hoisting the Egyptian flag.

Ports: Establishing a sub committee namely “The Sub Committee for Port Facilities” to implement the provisions of the ISPS Code with respect to port facilities.

The Major Committee approved the following in response to the recommendations of the follow-up committee in charge of the security of ships and companies:

1. Designating the Major Committee for the Security of ships and ports as the Recognized Security Organization (RSO) in Egypt.

2. Designating the Maritime Security Institute of AAST-MT Local Designated Organization in charge of conducting the preliminary security assessment of and setting up the security plan for shipping companies and ships.
3. Designating the recognized bodies in charge of auditing the security plan, checking its conformance with the requirements of the Code, and issuing the International Security Certificate for ships and companies only as follows:
  - a. Lloyd's Germanischer (GL), Det Norske Veritas (D.N.V.), American
  - b. Bureau of Shipping (ABS), Lloyd's Register (L.R), Bureau Veritas (B.V),
  - c. Nippon Kaiji Kyokai (N.K.K), Greek Register, and Polish Register.
  - d. Designating the Regional Maritime Security Institute of AAST-MT as the body in charge of conducting training as follows: ISPS Code familiarization course for all personnel serving in companies, ports and at sea, Ship Security Officer course, Company Security Officer course, and Port Security Officer course.

Determining the minimum governmental measures necessary for the implementation of the Code and the required documents for ports. In addition, entrusting the Regional Maritime Security Institute of AAST-MT with the task of implementing the requirements of the ISPS Code in cooperation with Ports Security Authority Egypt.

September 2003: The Maritime Security Committee has decided the following issues:

- The Maritime Security Committee has been nominated as the Recognized Security Institute.
- The Classification Societies to be entrusted with the task of auditing ships security plan and checking their conformance with international requirements have been determined through electing a number of IACS Group.
- Considering that Ports Police Administration has been playing an active role in implementing security measures in ports, it has been assigned the task of conducting security assessment and setting security plans in ports. The Ports Police Administration shall effect coordination with Regional Maritime Security Institute within the field of setting security plans and conducting security assessments in accordance with the documents and procedures stipulated in the ISPS Code.
- Port Facilities Assessment and Plans to be implemented in cooperation between Port Authorities, Internal Police, and the Regional Maritime Security Institute.
- Establishing and improving communication centres in each Port Authority connected to the Egyptian Maritime Sector Communication centre located at the Egyptian Maritime Administration.

- The Maritime Security Committee meets twice monthly to follow up the achievements and to facilitate the implementation process, which finalized on June 2004.

### 6.3 The Role of the Regional Maritime Security Institute

The Structure of the Institute:

1. Maritime Security, Ships.
2. Maritime Security, Port facilities.

The Institute provides the following:

*Training Session for Personnel Serving at Sea:*

1. Awareness of ISPS Code.
2. Company Security Officer.
3. Ship Security Officer.

*Training Sessions for Personnel of:*

1. Awareness of ISPS Code.
2. Port facility security Officer.

*Assessment and Plans:*

1. Security Assessment.
2. On-scene Survey.
3. Security Plane.
4. Follow-up implementation.

#### 6.3.1 Quality assurance of maritime training

Implementing the requirements of the ISPS Code and applying it to ships, ports and companies, in addition to training personnel actually began in 2004. All port security plans have been ready since the end of May 2004. Training and testing the security plans began in June 2004, and the actual application was started in July 2004.

EGYPT: In the light of the foregoing account, AAST-MT played a major role in implementing the requirements of the Code in Egypt on the specified date through the Regional Maritime Security Institute.

*First*: Training Marine Personnel (started in October 2003): Training session for masters, deck officers, marine engineers, crewmembers and port personnel. The following numbers of trainees were trained:

Awareness of ISPS Code: 8000 trainees.

Ship Security Officer Session: 1500 trainees.

Company security Officers: 250 trainees.

Port facility Security Officer: 160 trainees.

*Second*: Ships Assessment and Planning: Within the context of setting security plans for shipping companies and ships hoisting the Egyptian flag, the Regional Maritime security Institute conducted contracts with shipping companies to conduct security assessment and setting up security plans.

Egyptian flagged vessels complying with ISPS Code: 100 %.

None conventions vessels operating in territorial water: 70 %.

*Third*: Port Facilities Assessment and Planning: The Institute and Port Police team was formed, the team conducted security assessments for major Egyptian ports and port facilities serving ships engaged in international voyages. All the requirements of the Code are in effect.

Government Ports: 100 %.

Specialized Ports (petroleum, minerals ...etc): 60 %.



### 6.3.2 Regional recognition

The Regional Maritime Security Institute has been approved in Saudi Arabia, United Arab Emirates (UAE) and Lebanon as “Recognized Security Organization”, and started cooperation with Saudi Ports Authority and Lebanon Maritime Administration in the implementation of the ISPS Code.

**6.3.2.1 Related regional activities** Due to the pioneering role of the Academy as one of the specialized institutions of the Arab League and as a centre of expertise in the maritime field, the Regional Maritime Security Institute contacted the Ministry of Transport and Communications of the UAE seeking approval for the purposes of implementing the requirements of the ISPS Code. The Ministry responded favourably and promptly issued two decrees for the year 2004 accrediting the Academy’s Regional Maritime Security Institute as the body to implement the ISPS Code requirements in UAE, thus initiating cooperation with the Academy under this patronage.

UAE: The Institute organized a Regional Seminar and Workshop in Dubai, UAE at the end of February 2004 with the support and participation of IMO on the ISPS Code. The seminar was attended by official seniors from 15 Arab Countries and was successful in providing attendance with the urgency of complying with the requirement of ISPS Code before 1<sup>st</sup> July 2004.

### 6.3.3 The training courses in ISPS Code in the region

**6.3.3.1 The Republic of Lebanon “Scope of the Work”** The Institute has applied the ISPS Code and has implemented the security assessment and security plan for the 14 port facilities in Lebanon. This also includes measuring port facilities security officers’ performances in accordance with IMO guidelines.

Awareness course: 50 persons.

Ship Security course: 150 persons.

Port Facilities Security courses: 80 persons.

#### 6.3.3.2 The Republic of Syria:

- Ship security officers: 150 persons.

#### 6.3.3.3 The Hashemite Kingdom of Jordan

- ISPS Code Familiarization (Awareness course): 28 persons.
- Ship Security course: 32 persons.

#### 6.3.3.4 UAE “Dubai”

- Port facility security officer: 80 persons.

**6.3.3.5 Kingdom of Saudi Arabia “Scope of the Work”** The Institute participated in cooperation with the German Technical Cooperation Agency (GTZ) in the security assessment and development of security plans for 8 ports with 40 port facilities, all controlled by Saudi Port Authorities. Evaluation of ISPS Code was effected in each of the 40 port facilities as well as measuring the performance of security officers in port facilities.

- Port facility security officer: 92 persons.
- ISPS Code familiarization (Awareness course): 50 persons.

## 7 Conclusion

Due to full cooperation between Ministry of Transport, Port Police, Egyptian Navy and all security authorities in Egypt, the Regional Maritime security Institute was able to execute and fully implement the requirement of ISPS Code for all Egyptian flagged vessels and governmental ports before the dead line of 1<sup>st</sup> July 2004. Considering the experience gained by the Institute, the Academy completed the ISPS requirements and implementation in Kingdom of Saudi Arabia, Lebanon, Jordon and Syria. The mean objective in establishing “The regional maritime Security Institute” is to assess and help the regional countries and in particular African Nations to comply with ISPS Code requirements.

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