Examining and promoting ISPS Code training for Chinese seafarers

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Abstract

The effectiveness of implementing International Ship and Port Security Code (ISPS Code) relies greatly upon the awareness, knowledge and skills of maritime seafarers in respect of maritime security. For most of the seafarer training and certification systems in the world, the implementation of the code, compared with that of other maritime safety legislation, has limited flexibility in terms of time, and the subject thereof is new to many states. Therefore, the syllabus of ISPS Code training set down and the methods for training adopted in the first stage of implementation are becoming limited. It is worthwhile examining what has been done in terms of ISPS Code training and then how to promote it. Based on an introduction to Chinese ISPS Code training system and related facts, this paper analyzes major problems encountered in such training activities. Furthermore, it provides recommendations for possible solutions to achieve higher quality ISPS Code training, such as encouraging the use of Computer Based Training, the establishment of an ISPS Code information database and a co-operation with professional security companies.
Keywords: seafarer, maritime training, ISPS Code, maritime security.

1 Introduction

The UNCTAD's statistics show that China owned an ocean-going fleet with more than 2,300 vessels by the end of 2003. Together with the group of Chinese seafarers who are serving onboard foreign flag vessels which is about 40,000 – 50,000, of whom about 10,000 may need ISPS Code related training, examination and certification. In its home fleet, China has a huge group of

seafarers and it is reported that about 160,000 seafarers are licensed [2]. There is obviously great potential need for ISPS Code related training activities.

Thanks to the capability of the maritime education and training system in China, the huge workload could be done in a relatively short time period. Taking the Shanghai Seafarer Training Centre as an example, which is the largest seafarer training centre in China, it has completed training courses for more than 2,000 Ship Security Officers (SSO) by 1st July 2005 [11]. Meanwhile, available statistics from the Maritime Safety Agency (MSA) China report that by 1st July 2005, more than 1,100 vessels engaged in international voyages have obtained their Ship Security Certificates (SSC) and that more than 10,000 SSOs and Company Security Officers (CSO) have been trained, examined and certificated [2].

Although the Chinese MSA has laid down rules for the implementation of the Code and has published comprehensive standards for training and examination, the code is quite new in its nature in a maritime context and the implementation thereof had to be done in a very short time. Arguably, deficiencies and problems may be found once the details of the training regime are critically examined, by industry organizations or individual shipping companies

2 Introduction to the Chinese ISPS Code training system

After accession to a particular piece international legislation, the typical way of the Chinese Central Government to implement it is to promulgate domestic legislation. For the ISPS Code, the same procedure was applied, and in this particular case the MSA China was appointed as the responsible Government Agency. To this effect, *"The Rules for the Chinese Seafarers' ISPS Code Training, Examination and Certification, 2003"* [8] were developed by the MSA China. The rules also define the responsibilities and functions of the local MSA, who should work within the framework of the authority delegated to them by the National MSA with regard to seafarers' professional training and examination. Therefore the organization, supervision and management of ISPS Code training and examination was under the supervision of the respective local MSA offices.

The existing Seafarer Training Centres, which are established in accordance with national laws and regulations and are operated and managed in compliance with the quality standards, can carry out ISPS Code training after filing an application with the local MSA. Such applications shall be approved by the local MSA and filed at the national MSA. Additionally, the following requirements shall be met for ISPS Code training [8]:

- All trainers and examiners involved in ISPS Code training activities shall receive special training provided by the national MSA. The local MSA shall be responsible for the organization of the training.
- The trainers shall demonstrate sufficient knowledge with respect to ship security, as laid down in the chapter XI-2 of the SOLAS convention and other international or national maritime legislation, and shall possess the necessary skills in handling security matters. The trainers should also be familiar with maritime professional teaching and training techniques.

- The training centres shall have the necessary facilities and infrastructure in place such as classrooms, workshops, audio and visual equipment, models and reading materials, as well as training plans and materials, including SOLAS Convention, training syllabus, etc.

Table 1: The framework of ISPS Code training set by "The Rules for the Chinese Seafarers' ISPS Code Training, Examination and Certification" [8].

Contents for training	CONTACT HOURS	
	theoretical study	practical skill training
1. Introduction: Background, purposes and requirements	1	
2. The framework and contents of ISPS Code 2.1 The arrangement of the code 2.2 Definitions 2.3 Applications 2.4 The responsibilities of the member states 2.5 The over-riding authority of shipmasters for onboard safety and security 2.6 Declaration Of Security	1	
3. Ship Security 3.1 The obligations and responsibilities of shipping companies 3.2 The ship security levels and measures 3.3 The deployment and duties of company security officers 3.4 The deployment and duties of ship security officers 3.5 The outlines of ship security 3.6 The training and drills of ship security	4	
4. Ship Security Assessment and its implementation 4.1 Elements of ship security assessment 4.2 Contents of ship security assessment 4.3 Preparations, implementation and approval of ship security assessment 4.4 On-scene verification	2	2
5. The meaning, formulation and implementation of ship security plan 5.1 Purposes, uses and approval of ship security plan 5.2 Contents, formulation and implementation of ship security plan 5.3 Document control, up-keeping and caring of ship security plan	2	2
6. Training and Drills onboard 6.1 Security management 6.2 Applications of security evaluation methods 6.3 Security assessment and verification 6.4 Drills of ship security measures 6.5 Drills for the possible threats to ships, personnel and cargo 6.6 Applications of inspection, controlling and monitoring technologies 6.7 Identification of weapons, dangerous goods and installations 6.8 Briefing on the ship security alarming system 6.9 Use of ship-shore communication system 6.10 Use of ship security facilities	6	4
7. Introduction to port security facilities	1	
8. verification and certification of ship security	1	

As described in Table 1, the Rule recommends a detailed framework of ISPS Code related training so as to ensure the quality of ISPS Code training [8]. The total length of an SSO training course shall not be less than 26 contact hours, of which at least 18 hours are devoted to theoretical studies and practical skills training last for at least 8 hours. The size of each SSO training class shall not exceed 40 participants. After attending the training course, all participants shall be examined by the local MSA in a written examination. Only those trainees who score more than 80 points can be certificated as SSO An analysis on the ISPS Code training in China.

2.1 A discussion of ISPS Code related training

Arguably, the subject of ISPS Code, maritime security is quite new to most seafarers. Before its introduction into the shipping industry, the Maritime Education and Training system focused primarily on maritime safety and pollution prevention, as well as maritime economics and maritime law. This is the challenge but also the opportunity for ISPS Code training regimes. The challenges not only apply to the trainees but also sometimes to the trainers.

Maritime security covers rather broad topics such as smuggling, stowaways and piracy, although the main aim of the code is the prevention of terrorist activities. In additionally, even though terrorism is the particular maritime security topic, there are many detailed but often differing regulations and practices in different ports and nations. For example in the United States and Western European countries where maritime security has right from the start been a particularly critical issue, various regulations have been developed and several measures have been taken for security reasons. There are a few differences between those regulations and practices and the ISPS Code. The United States, for example, have made it compulsory to implement part A and B of the ISPS Code while in many other countries this is not the case. Meanwhile, the United States expanded the ISPS Code in its territory through the Maritime Transportation Security Act 2002 (MTSA), which means that all vessels calling at US ports shall not only meet the requirements as set down in part A and B of the ISPS Code, but also the MTSA. Inspections by US Government Agencies relating to maritime security are thus becoming wider and stricter. For example, the MTSA requires the US Coast Guard to carry out a "Detailed Vulnerability Assessment" for those vessels which have visited ports with poor port security facilities prior to calling at a US port [4,10,12]

Moreover, the ISPS Code covers not only maritime security aspects, but also some issues of criminal law nature. The relevant topics of the ISPS Code such as terrorism, smuggling and stowaways are all closely linked to the criminal laws. For example, Japan passed a Law with the intention to secure the security of her ports and ocean-going vessels, which mandates the observation of maritime security rules by shipowners and port facility managers, and stipulates that a shipmaster will be sentenced to prison not exceeding one year or be levied with 0.5 Million Yen if he files makes fraudulent reports on maritime security [2].

All of these laws, regulations, procedures and practices affect the operational procedures onboard ships. They may be of great help should a maritime security

incident onboard occur if properly incorporated into the training regime. However, the systematic introduction of these various laws may be difficult to achieve.

Lastly, maritime security issues have to be updated from time to time since the ISPS Code itself, the detailed practices and regulations, the legal system and procedures in different nations and ports are subject to change. This will make the coverage of ISPS Code training quite dynamic.

High quality ISPS Code training should seek to achieve the full coverage of the above. However, more efforts need to be made, because the prerequisite of reaching the goal is to have timely, sufficient and correct ISPS Code information. Although some entities or individuals are collecting the information, this may in some cases be incomplete or even limited data. For example, the MSA China currently does not have a formal way of collecting such detailed information. The shipping companies presumably collect such information focusing on only those routes or voyages that their vessels are sailing regularly. Therefore the information collected by the CSO may not always be reliable or broad enough and could in fact be quite limited with respect of maritime security.

Recognised Organizations (e.g. Classification Societies) or even Protection & Indemnity (P&I) Clubs might collect more reliable and professional information but they would normally circulates this only to their member ships [9]. In the above three scenarios, ISPS Code training centres would not benefit too much, since normally they would not have access to the information collated by the above organizations, but they are the organizers of every step of ISPS Code training! It would appear that a key problem, from a higher quality ISPS Code training viewpoint is the fact, that China has not yet established a specific "platform" to collect and exchange various reports and information.

2.2 The training facilities and trainers

There are other problems and difficulties in ISPS Code training, for instance the facilities available for ISPS Code training. The reality is that those security facilities are difficult to obtain in the existing Chinese criminal law system even for teaching purposes, and operating such facilities for training purposes is only permitted after an approval from the public security authority has been received. Therefore it is comparatively difficult for the training centres to have real security facilities and systems for demonstration or briefing during the training course. This is a formidable barrier to develop practical skills and in an effort to overcome this obstacle many training centres use multimedia facilities and materials during for the training courses.

Another problem may exist with respect to the ISPS Code trainers. The ISPS Code is not only new to most trainees but also to many trainers. An experienced and qualified ISPS Code trainer should ideally possess knowledge and experience of both maritime and security aspects. Private security companies or the National Public Security Authority are specialized in security matters but they need to expand their knowledge of maritime operational matters. Arguably, most of them can only provide some sort of support rather than being "trainers".

The Recognised Organizations, such as China Classification Society (CCS) are professionally very well qualified in this regard, but it is unrealistic to expect that the implementation of ISPS Code training can rely to a large extent on the trainers from CCS since the group of trainees to be trained is so huge. So ultimately the responsibility for the improvement of the quality of training goes back to the trainers.

2.3 The training hours

The 18 plus 8 hours is workable in the present framework of ISPS Code training, but will be not enough for higher quality training. Using multimedia technologies to improve the efficiency of lecturing and demonstration can solve part of problems in the regard. 18/8 is also a quite reasonable rate for the distribution of theoretical study and practical skill training. However, the reality and then a pity is that some training centres may cut down a few hours from the practical training hours and increase the hours for theoretical teaching due to the inadequate real security training facilities and the limitations of the trainers, while keeping the total hours the same. The cutting-down will of course affect adversely the quality of training.

3 Feedback on the ISPS Code training regime

Feedback received from different sectors of the shipping and port industry is useful for an assessment of present the ISPS Code training regime and for the further improvement of such training. The Paris Memorandum of Understanding reported in March, 2005 that the new code was satisfactorily observed onboard after the member states had conducted three months of intensive inspections on board ships focussing on ISPS Code compliance. Only 72 vessels among 4681 inspections were detained due to deficiencies relating to maritime security [4,5]. Meanwhile the Tokyo Memorandum of Understanding (of which China is a member) reports in its 2004 annual report details on ISPS Code compliance inspections carried in the second half of 2004 (see Table 2). The data shows that the ISPS Code compliant Security Systems were well implemented onboard. Finally, the 2004 annual report from the Chinese MSA indicates that the MSA inspected 1,008 vessels from the 1st July 2004 to 30th September 2004 specifically to assess ISPS Code compliance. A total of 255 vessels with about 586 deficiencies relating to ISPS Code compliance were identified. Altogether 17 vessels were detained (2.9%) [2]. It seems arguable to say that the quality of ISPS Code training is acceptable on the whole.

This is of course good news. However, the key problems mentioned before still exist. Some training centres reported that the trainees did acquire their practical knowledge on maritime security only after completion of the training course, and stated that they needed more opportunities for practical operations with real security facilities. One shipmaster, who is serving in an international shipping company engaging in the carriage of chemical goods, stated that there are many minor operational deficiencies onboard such as: poor gangway watch, unfamiliarity with the execution of security plans, improper ways to dispose of

suspect article such as packages and unfamiliarity with the restricted areas onboard. Partly, this may be due of the attitude or awareness of the seafarers onboard, but other reasons might be: insufficient training; over-stressing on theoretical teaching and neglecting practical operations; and inadequate knowledge on the regulations and practices of main shipping nations with respect to ISPS Code compliance.

Table 2: Port State Inspections on maritime security - TOKYO MOU, 2004 [3].

Authority	No. of inspections	No. of inspections with security related deficiencies	No. of security related deficiencies	No. of security related detentions	Detention percentage (%)
Australia	1,589	0	0	0	0
Canada	140	2	3	0	0
Chile	265	19	28	0	0
China	2,222	261	356	15	0.68
Fiji	3	0	0	0	0
Hong Kong, China	352	32	48	22	6.25
Indonesia	23	0	0	0	0
Japan	2,503	355	495	5	0.20
Republic of Korea	2,452	422	609	10	0.41
Malaysia	164	27	38	2	1.22
New Zealand	236	14	18	1	0.42
Papua New Guinea	0	0	0	0	0
Philippines	197	6	8	0	0
Russian Federation	487	26	32	4	0.82
Singapore	954	204	220	25	2.62
Thailand	73	1	1	0	0
Vanuatu	3	1	1	0	0
Vietnam	176	6	8	0	0
Total	**11,839**	**1,376**	**1,865**	**84**	**Regional 0.71%**

4 The future prospects for high quality ISPS Code training

Watching-keeping on the bridge seems easy if the ship runs smoothly. However, it will be never enough to have knowledge, skills and experience in case of being involved in maritime accidents or emergency operations. Maritime security as a part of maritime professional operations has this feature as well. The high quality ISPS Code training aims to develop the seafarers' capabilities or skills in actively and correctly responding in instances of breaches of security. But the present ISPS Code training is organized mainly to cope with the challenges faced through the implementation of the ISPS Code. The industry faced the enormous task of to organizing and completing training courses for a large number of seafarers. It is to be hoped that the quality of ISPS Code training could be improved in a long run.

The ISPS Code contains both theoretical study and practical skills training. For the former, high quality means full coverage of ISPS Code rules and regulations, including the regulations and practices adopted by major maritime nations with respect of maritime security. With respect to skills training, high quality implies the development of practical skills for ISPS Code emergency handling by means of modern technologies and demonstration of real security facilities.

5 The solutions

5.1 Establishing an efficient way of reporting security information and constructing an ISPS Code information platform

It will be very useful to have such means and a platform to solve the above mentioned problems. In fact, it will be beneficial for the whole industry to enable it to disseminate available information on maritime security aspects. A good example is the way in which BIMCO is collecting ISPS Code information mainly through collecting ISPS Code information from and circulating it back to its member ships. The International Maritime Bureau (IMB) is also a good example, which focuses on the collection on piracy information.

The suggested platform not only aims to simply disseminate information available, but also should be equipped with more functions. Such an information platform could be established in a maritime administration, a certain maritime research centre or in one of the maritime universities. In detail, the nature of such a platform is a web-based dynamic information database, collecting the latest security information on the regulations and practices and notices of different maritime nations, with respect to maritime security, piracy, and stowaways. With advanced computer technologies, the functions of such a platform could expand further to include information processing and analysis. The proposed structure is shown in Figure 1.

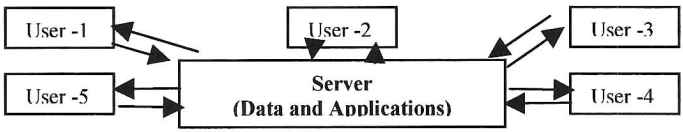

Figure 1: A possible framework of a proposed ISPS Code information database.

Table 3: Main items for ISPS Code reports [6].

➢ ISSC acceptance, additional information demands from port state inspector (e.g. Security plan, disclosure, problems in respect of the Continuous Synopsis Record, records of training, drills, exercises).
➢ Port State Control attitudes - Crew interrogation, availability of ID, use/display of firearms, aggressive attitude, abuse of powers, integrity, placing armed guards, refusal of access to shore facilities/shore leave, problems with specific crew nationalities.
➢ Problems over agreement on a Declaration of Security.
➢ Excessive information demands before entering port, current and historical information (e.g. Port, Customs, Immigration).
➢ Problems caused by trading history (previous calls at non-compliant port facilities, previous ownership or flag).
➢ Access control issues – identification, manning access points, searching visitors, accompanying visitors, securing waterside access, access to ships for essential visitors.
➢ Perceived port and ship security deficiencies.
➢ Problems caused (delay, detention, refusal of entry or departure, additional inspections).

The sources of the information intended to be collected, which are always the critical issue when establishing and operating such a platform, could be the information shared with other organizations or associations, the IMB or MSA for instance, and various reports sent by the shipmasters, pilots, companies, individuals, or maritime researchers. In case of maritime research, Table 3 shows a matrix used by the ICS/ISF

5.2 Up-grading computer based maritime security training and drills

The difficulties or restrictions for maritime training centres to obtain real security facilities or installation will remain for quite long period. But the requests for higher ISPS Code training or stricter security inspections are continuously presented to the industry. Alternatives must be found. Multimedia technologies are still an important alternative. But Power Point materials are not enough to demonstrate the security responses onboard since in many cases they are still pictures. More advanced technologies such as Flash and professional computer software shall be produced and employed, by which the trainees can have more opportunities for interacting exercises.

5.3 Co-operating with professional security companies or public security authority

Also for the same reasons, attempts shall be made to co-operate with professional security companies or public security authority although they are not professional in maritime. They are established in compliance with laws and regulations, owning legally certain security facilities and much experience in security responses. With their participations and rich expertise in the ISPS Code training, trainees and trainers can be both benefited, and hopefully, the possibilities of seeing or operating some real security facilities may increase as well.

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