

International Ship and Port Facility Security (ISPS) Code: the perceptions and reality of shore-based and sea-going staff

C. Burmester

Southampton Institute of Higher Education, UK

Abstract

This paper investigates the implementation of the ISPS Code and the related perceptions of shore-based and sea-going staff. The literature review identified issues of practical importance and shortcomings from which research questions and objectives were derived. These were then triangulated with observations made during an internship in the Quality Department of a ship management company. Consequently, inductive research methods were used for answering the research questions and a questionnaire-based survey was developed. The initial contact with ship management companies located in the UK, Cyprus, Germany, Norway and the Netherlands was made by post, using an introductory letter, with a shore-based and a sea-going questionnaire attached. The primary research survey took place between July and September 2004. The number of questionnaires sent to individuals was 218, which produced a total number of 111 completed sea-going questionnaires and 40 completed shore-based questionnaires. The survey's aim was two-fold. It examined the implementation issues and a perception comparison between sea-going and shore-based staff. The obtained data from 32 questions was analysed and discussed in detail, listing the findings from both survey groups. The survey showed the ISPS Code shortcomings and identified areas that require amendment, which were in the main congruent with warnings and criticism identified in the literature review. In addition, the survey gave evidence and examples that the ISPS Code does not provide uniform standards and clear guidelines, which led to recommendations being made.

Keywords: ISPS Code, implementation, perceptions, survey, PSC attitude, training, flag state, workload.

1 Introduction

The aim of the research was to investigate the implementation of the International Ship and Port Facility Security (ISPS) Code (2002) and to examine if there was a difference in the perception of shore-based compared to sea-going staff. The following introduction provides a brief explanation of events and influences leading up to the implementation of the ISPS Code.

The attack on the French tanker “Limburg” off the coast of Yemen in October 2002, the ramming of “USS Cole” by a small boat laden with explosives in 2000 and the terrorist attacks of September 11th 2001 led to a review of the International Maritime Organisation’s (IMO) “measures and procedures to prevent acts of terrorism, which threaten the security of passengers and crews and the safety of ships” [1].

This led to the ISPS Code being developed and which was adopted on the 12 December 2002 in the amendments to the International Convention for the Safety of Life at Sea (SOLAS), 1974, chapter XI-2. Compliance with the Code became mandatory on 1 July 2004 and was implemented and enforced by contracting Governments. Around 120 Governments worldwide have signed up to this convention by the 1 July 2004.

The ISPS Code applies to all passenger ships, high-speed craft and all cargo ships of 500 gross tonnes and more, on international voyages, and mobile offshore drilling units. Port facilities affected by the ISPS Code are those visited by these ships engaged on international voyages [1].

The objectives of the ISPS Code are to “establish an international framework involving co-operation between contracting Governments, Government agencies, local administrations and the shipping and port industries to detect/assess security threats and take preventative measures against security incidents affecting ships or port facilities used in international trade” [1].

The ISPS Code differs from previous regulations and conventions, as it is not self-contained within the shipping industry. The ISPS Code aims to prevent acts of terrorism. It consequently is an issue of state security and “as such the Code is driven by political impetus that does not recognise the commercial pressure of international trade” [2]. Therefore governmental intelligence agencies that ensure safety and security might get directly or indirectly involved with the ISPS Code; these are far less tolerant stakeholders. Overall, as Wall [3] stated “the consequences when things go wrong are quite serious”.

2 Result of the literature review

This literature review has examined and defined the reasons, scope and considerable range of the ISPS Code. The rationale for the ISPS Code being introduced is a safety and security issue, driven by political impetus and reaching into the sphere of state security. The scale of the ISPS Code is extensive. The commercial ramifications, which may affect the viability of merchant shipping operations, are far reaching but as yet are unknown due to the relatively short time the ISPS Code has been in operation. However, the ISPS Code entry-into-

force date passed with little noticeable disruption to merchant shipping. The question arises as to who will carry the burden of ISPS Code related costs? Will it ultimately be the end consumer as freight rates will rise and taxes might be imposed?

Various authors voiced concern regarding the proper implementation within the deadline which proved well founded and were confirmed by the IMO openly admitting that the deadline had not been met. Like any other global statutory Code the ISPS Code aims at providing uniform global standards and clear guidelines. The literature review identified various shortcomings in this area and gave examples. Furthermore, this review led to a focus on the identification and evaluation of ISPS issues of practical importance. The fundamental questions arising were:

- Has standardisation been achieved?
- Is the ISPS Code working satisfactorily and what are the possible shortcomings, if any?
- Are effective ship/shore relations supporting the implementation of the ISPS Code?
- Do shore and sea-going staffs have the same perception of the implementation and is it workable?

The answers will only be found by evaluating how people and entities that are directly affected by the ISPS Code such as, for example, ship managers and their shore-based personnel and seafarers, perceive the ISPS Code. There is no doubt that the interesting legal implications will not be known for some time and these have therefore not been the topic of this research, however the unknown practical quantity of the ISPS Code, has been the topic of this paper. This led to the definition of the following aims.

3 Methodology of questionnaire

Inductive research methods were found to be appropriate for the survey as most commonly used for social contexts and in social science research. The following methods were used:

- observations during an 8 week summer internship in June and July 2004;
- informal interviews;
- primary research:
 - introductory letter;
 - shore based staff questionnaire ;
 - sea going staff questionnaire;
- comparison, cross-referencing and analysing of the material collated.

4 Selection and justification of methods

It was decided that ship management companies were likely to be the best access point to shore-based and sea-going International Ship and Port Facility Security

(ISPS) Code related information. A fundamental willingness of ship managers to co-operate with this project was established. An introductory letter accompanied by two questionnaires and a self-addressed envelope was sent to all identified ship management companies located in the United Kingdom, Cyprus, Germany, Norway and the Netherlands. The necessary address data was obtained from the World Shipping Directory [4]. An introductory letter together with the shore-based and the sea-going questionnaire were addressed and sent to a total of 233 Managers, or Company Directors, within ship management companies. Fifteen addresses turned out to be either incorrect, or the individual did not fall into the intended survey category. Therefore a total number of 218 potential participants received the questionnaires.

The letter asked for Managing Directors, Managers, Company Security Officers and Company Internal Auditors to complete the shore-based staff questionnaire and for Masters, Chief Officers and Ship Security Officers to complete the sea-going staff questionnaire. Out of courtesy, all the before-mentioned potential participant categories were invited to take part in the survey. However, it was expected that most likely only the Company Security Officer (CSO) and Master would complete the questionnaires, which was shown in the results. This outcome was welcomed as these “key informants” have the necessary knowledge to respond and are likely to be a more reliable source of information than other sources. It has to be noted that some CSOs fulfil multiple roles within their organizations.

Table 1: Number of questionnaires sent and returned.

Number of questionnaires sent and returned in the survey of July – September 2004					
Total number of questionnaires sent to individuals	Total number of companies addressed	Total number of sea going questionnaires returned	Percentage of sea going replies	Total number of shore based questionnaires returned	Percentage of shore based replies
218	197	111	50.9%	40	18.4%

The survey contained thirty-two questions. Of these four were aimed at establishing the profile of the respondents. The remaining twenty-eight questions were designed to investigate into ISPS Code implementation issues and the perceptions of sea-going compared to shore based respondents. At the end of the survey the respondents were given the opportunity to give comments in an open format. The number of questionnaires returned was 40 for shore-based questionnaires, which equates to 18.4% of the total, and 111 for sea-going staff questionnaires, which equates to 50.9%. However it has to be said that each ship manager manages more than one ship so the figure of 50.9% does not relate to the total number of ships that could have been reached, if each ship manager’s ship had participated. On the other hand, it can be assumed that 111 replies constitute a good sample of European ship managers’ sea-going responses.

The interviewees’ location was widely dispersed; therefore it seemed advisable to conduct the questionnaire survey by mail and/or by e-mail.

A rapport was established with those who granted cooperation, using e-mail for communication. In these communications great care was taken not to be considered intrusive and to reassure that the information obtained from the questionnaires would only be used for the purpose of this dissertation. Reassurance was given to participants that confidentiality was guaranteed and no company information would be distributed as a result of this research. The e-mail version of the questionnaires facilitated communication with the vessels with quick response times.

Presenting and analysing collected data truthfully and cross-referencing was important in order to achieve undistorted conclusions and accurate recommendations.

5 Results and discussion

The survey showed 97% to 99% issuing of International Ship Security Certificates (ISSC) as reported by shore-based and sea-going respondents, indicating almost complete compliance with ISPS Code's requirements by 1st July 2004. A new global standard such as the International Ship and Port Facility Security (ISPS) Code is worthless without proper implementation and compliance. It is ultimately the initiative and co-operation of seafarers' that is relied upon to prevent breaches in maritime security. It was acknowledged by Wall [3] and others that the ISPS Code was "forced" through in an unprecedented short time frame and was far from perfect. This led to appeals by Grool [5] and others to apply the Code with a sense of pragmatism and common sense, confirming that it contained shortcomings and with the need for details to be amended later [6,3]. The compliance on entry-into-force date of the ISPS Code showed that the maritime industry could adopt such complex measures within a much tighter time frame than previously believed possible; which might encourage bodies such as the International Maritime Organisation (IMO) to make progress on other conventions in a shorter time in the future.

The need for ISPS Code amendments, foreseen in the literature review, was confirmed by results of a survey conducted by the author of this paper. The survey showed ISPS Code shortcomings and identified areas that require amendments, as explained in more detail later. Additions and amendments to the ISPS Code are being debated currently in the International Maritime Organisation (IMO) working group [7]. Whether this will be accomplished as speedily as the introduction of the ISPS Code remains to be seen. Amendments are usually proposed to the Facilitation Committee (FAL) of the IMO. A proposal for example made during the 31st session (19-23 July 2004) will be adopted in the July 2005 Committee session, to enter into force on 1 January 2007.

The survey's aim was two-fold; to examine implementation issues and obtain a perception comparison between sea-going and shore-based staff. The questionnaires themselves were sub-categorised into two areas of investigation. The introductory part was aimed at building a profile of the participants and which confirmed that participants were those who hold most responsibility with

regards to ISPS Code duties. The main body related to how and when ISPS Code compliance was obtained on the one side, and established what needs to be done to further improve the ISPS Code on the other side.

The survey results regarding ISPS Code implementation issues are in the main congruent with warnings and criticism identified in the literature review and observations made during an internship, which allowed for findings to be triangulated; examples being non-uniform standards with regards to geographical areas of operation, training, varying international standards in compliance of ships and ports and the exclusion of ships under 500gt, as raised by [8, 9, 10]. Pre arrival notifications were identified by [10] as an area of non-standardisation. This is of particular interest as a report for the European Commission in 1998 addressed the issue of uniform arrival and departure documents and procedures [11] and recommended a common set of ship arrival and departure forms based on IMO FAL forms 1, 3, 4 & 5. It is therefore surprising why such common procedures have not been implemented into the ISPS Code from the start. The survey found, that sea-going and shore-based respondents are in agreement that all these issues need to be addressed.

The issue of training was also raised in the literature review and comments made in the survey suggest that according to the respondents, ISPS Code related training needs to be reviewed. It was the view of the respondents that training would benefit from being more clearly defined and incorporated into STCW 95, as this would avoid duplication of training and eliminate variances in training requirements between flag states. An added complication is that at present one flag state does not necessarily approve training undergone in fulfilment of another flag state's requirement. Furthermore, findings from an OECD survey should be incorporated that highlighted the importance of providing practically orientated training, rather than emphasising theoretical knowledge [12].

The findings of the survey further identified arguments regarding the security issue of the Automated Identification System (AIS) and pilotage. The area of AIS (which falls under SOLAS Chapter 5, Safety of Navigation) was intentionally not touched upon in the literature review and the survey, as it would merit a dissertation topic on its own. The same applied to the Continuous Synopsis Record (CSR) and Ships Security Alert System (SSAS). The security aspect of pilotage, raised in the survey by respondents, is recommended to be addressed by the working committee of the IMO.

A detailed analysis of the responses showed, that for some of the questions a different ISPS Code implementation perception by the two survey groups might be of relatively little or no relevance and/or consequences regarding an effective ship-shore relationship. For example, one question examined the co-operation and support provided by the flag state in implementing the ISPS Code. The survey findings confirmed the literature findings, namely considerable performance differences amongst flags, and the poor performance of the Panama Flag. The perception of sea-going and shore-based respondents differed for this question, but a possible explanation was given as this could be explained by the fact that the ship managers were dealing directly and repeatedly with the flag to fulfil ISPS requirements and obtain certification whilst the sea-going staff had

little direct dealings with the flag administration. It is believed that this difference did not affect the ship-shore relationship.

The survey further revealed that there are specific areas of the ISPS Code implementation that were in need of improvement. This also identified differences in the perception of respondents. For example, 35% of the sea-going respondents regarded additional training as the most pertinent area, while only 18% of the shore respondents rated this as a priority in their response. In contrast, the highest rated area of concern to shore-based respondents, with 29%, was a review of procedures, whereas the sea-going respondents rated this area at only 19%. On the one hand it might be argued that this indicates that both areas need addressing. On the other hand one could argue that this identified areas of conflict between shore and sea, where one side demands more training whilst the other wants to provide a review of procedures. Differences in perception are acceptable as long as they have no underlying root causes that make the cooperation between sea and shore counter-productive.

The results of the survey showed that effective ship/shore relations were supporting the implementation of the ISPS Code. Without these, the task of ISPS Code implementation would not have been accomplished. Especially the open comments made by respondents showed similar attitudes, values and an overall perception of the ISPS Code implementation issues.

The analysis of the data showed both common perceptions and differing perceptions in various areas between the sea-going and shore-based respondents and further resulted in the identification of ISPS Code related issues that require addressing in the future, of which the main ones are:

- Uniform standards:
 - Procedures;
 - pre-arrival notifications;
 - compliance of port facilities;
 - emergence of a global “two-tier” compliancy regime (certain countries and geographical areas failing to be compliant and/or to meet standards);
 - training.
- Workload (paperwork distracts from other duties, especially in Short Sea Shipping).
- Port State Control (PSC) attitude; especially the alleged heavy handedness of the United States Coast Guard (USCG).
- Human element related aspects (denial/delay of shore leave, crew security checks).
- Pilotage (conflict of time available versus security checks; necessary equipment of pilots that might be an infringement on security, example “ladder” knife).
- Automated Identification System (AIS) (accessibility to possible terrorists).
- ISPS Code requirements infringe International Safety Management (ISM) Code and Standard Training Certification and Watchkeeping Convention (STCW95) requirements.

This survey provided qualitative and quantitative ISPS Code implementation related data, which could form the basis of further research. The survey also confirmed points identified in secondary literature. Furthermore, the positive response rate to the survey would suggest that the survey topic is of interest to those directly affected by the ISPS Code and the shipping industry. Notwithstanding the limitation of the survey (size of sample, snapshot nature of the research and restriction to a geographical area), given the broad scope of the questions, the cross section of respondents and the higher than expected number of responses obtained, this indicates to the author that the results and data obtained are substantive and therefore of value in assessing the implementation and perceptions of sea-going and shore-based staff.

6 Summary and conclusion

The research investigated the implementation of the ISPS Code by examining secondary data, in the main literature and observations made during an internship, and primary data obtained from a survey. The survey investigated the implementation of the ISPS Code and perceptions of shore-based and sea-going staff. Many of the findings of the survey underpinned results identified in secondary material. Examples of these were an increased ISPS Code related workload especially for sea-going, but also for shore-based staff; human element related aspects, such as denial and/or refusal of shore leave and/or joining of vessels; and non-uniform standards such as training, Port State Control attitude, port ISPS Code compliance. However, the analysis of all data collated from the survey has also brought to light issues that should be addressed and can provide the basis for further research. Examples were non-uniform pre-arrival notifications and that ISPS Code security checks reduce the working time available for pilots during sensitive passages when the focus should be first and foremost on navigational matters.

The survey confirmed almost complete compliance with the ISPS Code. Ship's ISPS Code compliance was made possible due to an immense effort and close cooperation between ship and shore personnel. However, the survey showed that there seemed to be a division between those who believed the ISPS Code to be a "curse and burden inflicted on the shipping industry", as quoted by one respondent, and those who perceived benefits from the ISPS Code. Effective ship/shore relations supported the implementation of the ISPS Code. Overall there were areas of different perception between sea-going and shore-based staff which was, upon closer inspection, not impeding the overall success of implementation.

The ISPS Code is identical on paper for every ship operator, ship and seafarer around the world. Despite this, regional variance in implementation success was identified to the extent of the danger of an emerging two-tier shipping system. The harmonious cooperation between all the stakeholders involved in the ISPS Code process was identified as a problem. Shipping is only one of the stakeholders affected by the ISPS Code but it had to bear the brunt of the ISPS Code implementation and endure the hardest scrutiny. Ports, which are closely linked to governments that ratified the ISPS Code, should have been the

forerunners in ISPS Code implementation, but instead ports were the weakest link and fell behind with compliance. A certain amount of disillusion from seafarers and shore-based staff was detected with regard to the strictness of implementation for ships on one side and the slackness to apply the same rigueur on ports on the other side. As respondents commented, "if the security measures in ports would work then hardly any unauthorised person should be able to reach a vessel whilst in port in the first place" and "without good port security there is little a ship can really do against organised crime or terrorism". Furthermore, certain geographical areas were identified as unable or unwilling to meet ISPS Code requirements and so globally different standards have emerged.

Evidence was given that the ISPS Code was announced on introduction as being an unfinished product that needed amending. The data from the survey showed numerous ISPS Code shortcomings. It was demonstrated by an example that, lessons from the past of how to harmonise and facilitate procedures were not incorporated into the ISPS Code. This left mainly the shipside of the ship/port interface to struggle with inadequacies that put burdens on the seagoing and shore-based staff. However, by implementing the ISPS Code in a timely manner, the shipping industry demonstrated that it was, despite all odds, capable of complying with the ISPS Code in practice. Demands to apply the Code with a sense of pragmatism and common sense were voiced within the industry, which reflected that implementing such a far reaching international convention is both complex and maybe cumbersome, leaving refinements and changes to be made later.

It was shown that the ISPS Code does not provide uniform global standards and clear guidelines, which might be partially due to different governmental interpretations of ISPS Code requirements. The way forward could be summarised by learning from those countries and companies where the ISPS Code has been successfully implemented. The main point would be to make the ISPS Code more user-friendly, consistently applied and workable. It should be examined whether the ISPS Code indeed infringes on other conventions such as the ISM Code and STCW 95, by security measures impinging on safety matters, and the workload of the ISPS Code contravening standards for manning, working hours and rest periods. Clearly a Code that is detrimental to other conventions must be remedied as quickly as possible before accidents and incidents result from it. The main task should not be to work harder or burden especially the seafarer with ever increasing paperwork, manuals and directives, but to let common sense and practicality prevail and work smarter. An international Code should be streamlined and workable from the outset. From the above it is also recommended to address and rectify the identified shortcomings with regards to global uniform standards in a speedy and un-bureaucratic manner so that there is a consistent application of agreed practices. The ISPS Code procedures have to be streamlined, pre-arrival notifications standardised, port facilities have to be critically and impartially evaluated with regard to their ISPS Code compliance, and the emergence of a global "two-tier" compliance regime has to be counter-acted by knowledge transfer and financial support. However, some of these issues might prove difficult to achieve due to global culture

differences, the resources available and the willingness of governments to be adaptable and to co-operate. Sea-going respondents to the survey asked for more ISPS Code related training, which is in accordance with known research, recommended to be more practical orientated rather than theoretical. International agreed standards and working guidelines are recommended to be introduced to eliminate the heavy-handedness of Port State Control officers.

To finally conclude, the objectives of the ISPS Code are to “establish an international framework involving co-operation between contracting Governments, Government agencies, local administrations and the shipping and port industries to detect/assess security threats and take preventative measures against security incidents affecting ships or port facilities used in international trade” (IMO, 2003, p. iii). As indicated in the research and results from the survey, much has been achieved by the implementation of the ISPS Code, however, there appears the need for a lot of work still to be done in the area of uniformity of standards and human related aspects to make the ISPS Code a successful security tool.

References

- [1] IMO *ISPS Code*, 2003 Edition. London: IMO ISBN 92-801-5149-5, 20.
- [2] Moloney, E. (2003) “The International Code for the Security of Ships and of Port Facilities”. *Port Technology International*, Autumn 2003, London: Henley Publishing Ltd.
- [3] Wall F. *personal communication* at the *IMarEST conference 20 /21 November 2003*, London: Institute of Marine Engineering, Science and Technology.
- [4] World Shipping Directory. 14th ed [2 volume set] Lloyds Register-Fairplay, 2003, ISBN 1901290409, 2003-2004.
- [5] Grool, R. “Ships and cargoes: terrorist tools?” *Seaways* February 2004.
- [6] Norton Rose. “Improving Maritime Security: the ISPS Code”. Available from www.nortonrose.com/publications, accessed 06 Dec. 2003.
- [7] Cooper, N “ISPS after implementation”. *Seaways*, February 2005.
- [8] McKay, R. “Australia to allow non-ISPS ships to berth”. *Lloyds List*, 30 June 2004.
- [9] Sagen, A. “Where are the ISPS standards?”. *Know How Publishing, Norway*, No 3-2003.
- [10] Bell, D. “After the hiccups, a workable Code please”. *Lloyd’s List*, 22 July 2004.
- [11] Maritime Research Centre, Southampton Institute (UK) and Partners. “Comparison of Documentation in Short Sea Shipping and Road Transport”. For The Directorate-General for Transport (DG VII), The European Commission. Nov 1998.
- [12] OECD. “*Availability and Training of Seafarers*”. Maritime Transport Committee, Jan. 2003.