

# ISPS Code's Compliance and Operational Performance in Nigeria Seaports: Port Users Perspective

D. E. Onwuegbuchunam<sup>1</sup>, M. O. Aponjolosun<sup>2</sup> and A. A. Oludare<sup>3</sup>

1. Department of Maritime Management Technology, Federal University of Technology Owerri, P.M.B, 1526, Owerri, Nigeria

2. Department of Maritime Transport and Business Studies, Federal College of Fisheries and Marine Technology, P.M.B 80063, Nigeria

3. Department of Nautical Science, Federal College of Fisheries and Marine Technology, Nigeria

**Abstract:** In this paper, we developed performance assessment criteria to evaluate effects of compliance to ISPS Code's requirements on port/terminal operation in Nigeria. The primary data for the study were obtained from copies of survey questionnaires administered to random sample of port users stratified by areas of specialisation. Hypotheses governing this study were based on the premise that additional port facilities provided and security measures adopted in compliance to ISPS code's requirements would have positive spillover effects on port operations. Evidence from data analysis indicated that compliance to ISPS code had positive effects on performance of operational performance of Nigeria ports. Similar effects were also observed in port users' satisfaction and profitability. The paper contributes by providing decision support framework for monitoring and gauging outcomes of ISPS code administration in ports and terminals.

**Key words:** ISPS code, port performance, turnaround time, cargo throughputs, vessel throughputs.

## 1. Introduction

Port can be defined as an area within which ships are loaded with and/or discharged of their cargo and includes the usual places where ships wait for their turn [1]. In many ways, ports can be seen as a window to a nation; reflecting demands of the country products of its hinterland and showing the wealth and power which a country and its populace can exert [2]. Until traffic is able to move freely once more, free from risk of attack, it will be difficult to see a country live up to its potential and would seemingly be trapped in a downward spiral of terrorism, kidnapping, theft and piracy. The terrorist attacks of September 11<sup>th</sup>, 2001 by Al Qaeda on US World Trade Centre led to the development of ISPS code by IMO (International Maritime Organization) which was incorporated into the International Convention for the Safety of Life at

Sea (SOLAS), 1974, Chapter XI-2. ISPS code which came into force on 1 July 2004 was implemented in Nigeria in order to mitigate effects of terrorists' attacks (in event of such occurrence) in the maritime industry and eradicate other forms of criminalities such as cargo theft, robbery, stowaways, etc. in the ports. ISPS code addresses maritime problem bordering on terrorism and covers several types of criminal acts. These include: smuggling, cargo theft, stowaways, illegal immigration, piracy and collateral damage due to fire and explosion on ships and port facilities, whether intentional or otherwise [3]. Although ISPS code came about in reaction to the terrorist attacks on World Trade Centre in New York, in September 2001, however it does include elements of two other problems, piracy and stowaways which have been of concern for many years [4].

### 1.1 The Research Problem

ISPS code was ratified and implemented in Nigeria ports and terminals so as to eradicate criminalities in port and its environs which negatively affected port

---

**Corresponding author:** D. E. Onwuegbuchunam, Ph.D, research field: Port, logistics & sea transport modelling. E-mail: don@futo.edu.ng.

operations. On 20/12/17, the United States Coast Guard organisation issued port security advisory document indicting Nigeria and others; as countries in which ports adequate anti-terrorism and security measures were not taken [5]. The implication of the communiqué is that the blacklisted countries risk having vessels originating from their ports detained or sanctioned on getting to US ports. However, by February 2018, the US Coast Guard (USCG) officials while on a delegated visit lauded efforts made so far by Nigeria's ISPS Code's Designated Authority (DA)-NIMASA (Nigeria Maritime Administration and Safety Agency), in implementing safety and terrorism issues related to ISPS code [6]. Given these discordant reports from the same USCG organization, the level of compliance achieved so far, in terms of facilities/security measures provided and their effects on ports operations are not obvious. Consequently, post compliance assessment of effects of the code on ports and port users' performance has become necessary in order to gauge policy outcomes and identify areas for improvement. The central objective of this paper is to determine significant effects of compliance to ISPS code on ports and port users' operational performance in Nigeria.

### *1.2 The Objectives of Study*

The specific objectives of this study are to assess effects of compliance to ISPS Code's requirements on the following in Nigeria ports:

- i. provision of facilities/security measures.
- ii. performance of ship operation.
- iii. performance of cargo operation.
- iv. port users satisfaction/profitability

## **2. Conceptual and Literature Review**

### *2.1 Port Facility Security and ISPS Code*

In relation to the maritime security measures, port facility can simply be defined as the location where the ship and port interface occurs [7]. According to Onwuegbuchunam et al. [2], the adoption of

international Ship and Port facility Security (ISPS) Code by the International Maritime organization and other transport security related measures was to provide solution to security challenges confronting maritime transport and hence prevent/mitigate any potential negative impact on international transport and trading system. Risk management embodied in the code through a number of minimum functional security requirements for port facilities, according to Alderton [1] includes:

(1) PFSA (Port Facility Security Assessment) which involves risk analysis of all aspects of port facility's operation. The goal is to determine which parts of it are more susceptible to be the subject of attack;

(2) PFSPs (Port Facility Security Plans) meant to ensure application of measures designed to protect the port facility and ships, persons, cargo, cargo transport units and ship stores within the port facility from the risks of a security incident [8] ;

(3) PFSO (Port Facilities Security Officer): who is responsible for the implementation, revision and maintenance of the PFSPs.

(4) Introduction of additional security measures and security equipment in port.

Compliance to ISPS code entails procurement and installation of certain security facilities and provision of additional security measures in the ports. Examples of these measures include: introduction of port pass, additional security personnel, new access control gate measures at the gates, screening measures, use of CCTV camera and provision of perimeter fencing.

### *2.2 Port Operational Performance and ISPS Code Compliance*

UNCTAD [9] posits that operation is the largest and most commonly applied area in port performance assessment. It also states that comparative indicators of port operation refer to handling rates of vessels and cargo. Chung [10] states that operational performance of a port is generally measured in terms of speed with which a vessel is dispatched, rate at which cargo is

handled and duration that cargo stays in port prior to shipment or post discharge. Chung [10] further states that assessment of a port's performance from point of view of exporter/importer (or port users) is quite basic in that there is only one indicator of interest, dwell time of cargo in port measured in terms of number of days cargo shipment remains in port. A high dwell time is generally an indication that all is not well with the port. UNCTAD [11] study on ports operational performance shows that the ISPS code's compliance enhanced market standing, decreased ship's turnaround time and ship owners' confidence and also led to more ships calling at the port. According to the study, such factors as additional security personnel, new access control measures at gates, screening measures, introduction of port worker passes, better planning of container yards and better internal organization contributed to increased efficiency. Onem [12] notes that through identification of risks and application of counter measures as well as technological improvements, local port capacity is significantly improved. However, in addition to serving as a deterrent to terrorism, improvements in security features of port areas curb looting and prevent unauthorized access to restricted areas.

Compliance to ISPS Code's requirements relates to provision of additional facilities and security personnel and adoption of security measures. Thus, it can be accepted that these measures would impact positively on operational performance of compliant ports. Operational performance of a port can be measured by quality of ship and cargo operations in that port. According to extant literature, effectiveness of ship operation can be assessed in terms of ease of cargo delivery, documentation and ships' time in port. In the same vein, cargo operation can be measured by extent of cargo/ship throughputs and berth utilization. Apart from these port specific measures, port user specific attributes e.g. port customer satisfaction; his cost of operation and profitability etc. may also be included in assessing effects of port's ISPS policy introduction.

The scope of this paper will however be limited to assessment of effects of compliance to ISPS code's requirements on security facilities, personnel provided and security measures adopted. Other performance assessment included effects of the Code's compliance on ship and cargo operations, port users' satisfaction and profitability.

For purposes of this study, implementation of ISPS code implies adoption of the principles, standards and other requirements laid out in the code's document. The notion of compliance applied in this paper, however, may refer to what extent the code's stipulated requirements have been adhered to by the concerned parties (The Designated Authority, Port Authority and terminal operators). Consequently, the terms: implementation and compliance were not used interchangeably in this paper.

### **3. Methodology**

The data for the study were obtained from copies of questionnaires administered to a random sample of port users that operate in selected Nigeria ports. The questionnaire featured close ended questions about how compliance to ISPS code has affected operational attributes of ports patronised by the respondents. The first part of the questionnaire elicited information on demographic characteristics of respondents including aspects of port activities they routinely engaged in. The second part consisted of questions related to ISPS code's compliance in terms of specific port facilities provided, ports' operational performance characteristics/outputs. Other questions included also related to port user specific attributes. Responses of the port users on how compliance to the code has affected these attributes were elicited. The response format was based on five-point Likert scale (strongly agree (5), agree (4) undecided (3), disagree (2) and strongly disagree (1)). Two hundred copies of questionnaire were administered to the port users. These users were made up of Clearing & Forwarding agents, shipping & logistics agents, road haulage agents and others. One

hundred and seventy four copies of questionnaires were returned completely filled. A cross section of the data set obtained and used for this study is attached as Table A1 in the appendix. Both descriptive and inferential statistical models were employed for the data analysis. One-way analysis of Variance (ANOVA) model was employed to test for statistically significant differences in opinion of respondents on questions posed in the questionnaire.

### 3.1 ANOVA Model

Analysis of Variance (ANOVA) is a method for testing the hypotheses that there is no difference between several population means (usually at least three) when there is only one qualitative variable which denotes the treatment levels and only one measurement variable (quantitative).

Mathematically, One-Way ANOVA Model applied in this paper can be formulated as:

$$X_{ij} = \mu + \alpha_i + e_{ij}; \quad i = 1, 2, \dots, k; \quad j = 1, 2, \dots, n. \quad (1)$$

where,  $X_{ij}$  = the measurement in the  $(ij)th$  cell i.e., the response of  $j^{th}$  respondent on  $i^{th}$  level of ISPS Code.

$\mu$  = grand mean;

$\alpha_i$  = effect of the  $i^{th}$  level of ISPS Code;

$e_{ij}$  = the error associated with  $X_{ij}$ .

Assumptions:  $e_{ij} \sim N(0, \sigma^2)$   $\sum_i \alpha_i = 0$ .

### 3.2 Hypotheses

$$H_0 : \alpha_1 = \alpha_2 = \alpha_3 = \alpha_k$$

$$H_A : \text{at least } \alpha_1 \neq 0$$

$x_{ij}$  : measures of ports' ISPS code's attributes.

$i = 1, 2, 3, k$  represents indices of ISPS code's compliance operationalized alised by measures of port facility/security, ship and cargo operations;

$j = 1, 2, \dots, 174$  represents port users (Clearing & Forwarding, shipping & logistics, haulage and other agents).

## 4. Data Presentation and Analysis

Table 1 presents descriptive statistics on profile of respondents and their areas of specialization. We note

here that survey participants engaged in relevant port activities given their areas of operation. In terms of educational qualifications, about 90% of them have at least post-secondary educational qualification. This percentage is also true of the sample in terms of work experience. That is, majority of the respondents have work experience spanning over five years. It is therefore evident that those surveyed are literate, experienced, routinely engaged in port terminal activities and hence could have provided informed responses to the questionnaire items. A snapshot of primary data collected for the study can be found in Table A1 in the appendix.

In identifying the focus group for the survey, it was necessary to ascertain how aware the respondents were regarding ISPS code's implementation in Nigeria's port/terminals. Our findings showed that about 80% (i.e. 32.76% + 47.7%) of port users had full knowledge of the code's implementation, see Fig. 1.

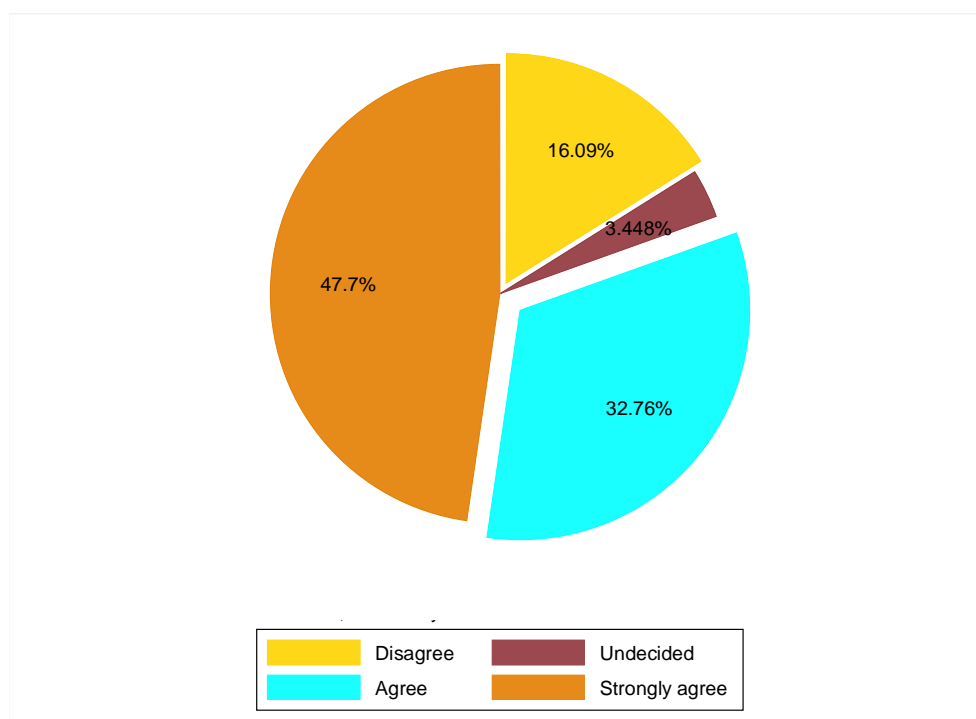
As part of implementation requirements of ISPS code in Nigeria ports/terminals, additional facilities were required to control unauthorized access to port facilities and to monitor movement of persons within such facilities. Table 2 presents findings from port users on their opinion regarding additional facilities put in place in compliance to ISPS code's requirements. Thus, majority of respondents stated that additional security personnel and access control/screening measures have been provided and adopted respectively. Others facilities provided include: perimeter fencing, port-pass and CCTV (closed circuit television). The mean rating response scores of their opinion regarding provision of these facilities (factors) are listed in order of magnitude in the table. The " $F$ " statistic value of 13.54 is significant at calculated  $p$ -value of 0.000; indicating that significant differences exist in the opinion of respondents. ANOVA model results in sections that follow would be interpreted accordingly.

In Table 3, the opinion of respondents on effects of ISPS code's compliance on attributes of ship operations is presented. According to the distribution, improvement

**Table 1** Demographic characteristics of the port users.

Profile of the respondent/firms	No. of respondents	Percentage (%)
Area of specialization		
Clearing & forwarding	82	47.13
Shipping & logistics	49	28.16
Haulage operations	26	14.94
Others	17	9.77
Total	174	100
Educational qualification		
SSCE	16	9.20
OND/NCE	68	39.08
BSc/HND	46	26.44
MSc	8	4.60
Others	36	20.69
Total	174	100
Work experience (years)		
<5 yrs	17	9.77
5-10 yrs	57	32.76
11-15 yrs	44	25.29
>15 yrs	56	32.18
Total	174	100

Source: field work.

**Fig. 1** Port Users' awareness of implementation of ISPS code in ports/terminals in Nigeria.

Source: author, data analysis.

**Table 2** Response on provision of additional ISPS code's facilities/security measures in the ports.

Factors	Mean	Std. Dev.	Freq.
CCTV	1.701	1.082	174
Port pass	2.598	1.393	174
Perimeter fencing	2.626	1.499	174
Screening measures	2.678	1.486	174
Access control	2.690	1.461	174
Security personnel	2.690	1.461	174
ANOVA model fitting information			
Source	SS	df	MS
Between groups	133.514	5	26.703
Within groups	2,047.477	1,038	1.973
Total	2,180.991	1,043	2.091
<i>F</i> statistic =13.54			
<i>prob.&gt;F</i> =0.000			

Source: author, based on field survey.

**Table 3** Response on effects of Compliance to ISPS code on attributes of ship operation.

Factors	Mean	Std. Dev.	Freq.
Cargo clearance time	3.213	1.441	174
Documentation time	2.891	1.404	174
Ship serving time	4.161	1.047	174
Ship turn round time	2.828	1.160	174
ANOVA model fitting information			
Source	SS	df	MS
Between groups	197.753	3.000	65.918
Within groups	1,122.379	692.000	1.622
Total	1,320.132	695.000	1.899
<i>F</i> statistic = 40.64			
<i>prob.&gt;F</i> = 0.000			

Source: author, data analysis.

in ship serving time, cargo clearance time, documentation and ship turnaround times are significant positive effects of compliance to requirements of the code. It is expected (a priori) that compliance to ISPS code would have significant indirect positive effect on attributes of ship operations. Therefore, given the improvement in ICT facilities, introduction of port gate-pass and perimeter fencing (to restrict access to only port users with genuine business in port premises), cargo clearance time, documentation time, ships serving and turn round times are expected to be reduced. Security within the ports is also expected to improve.

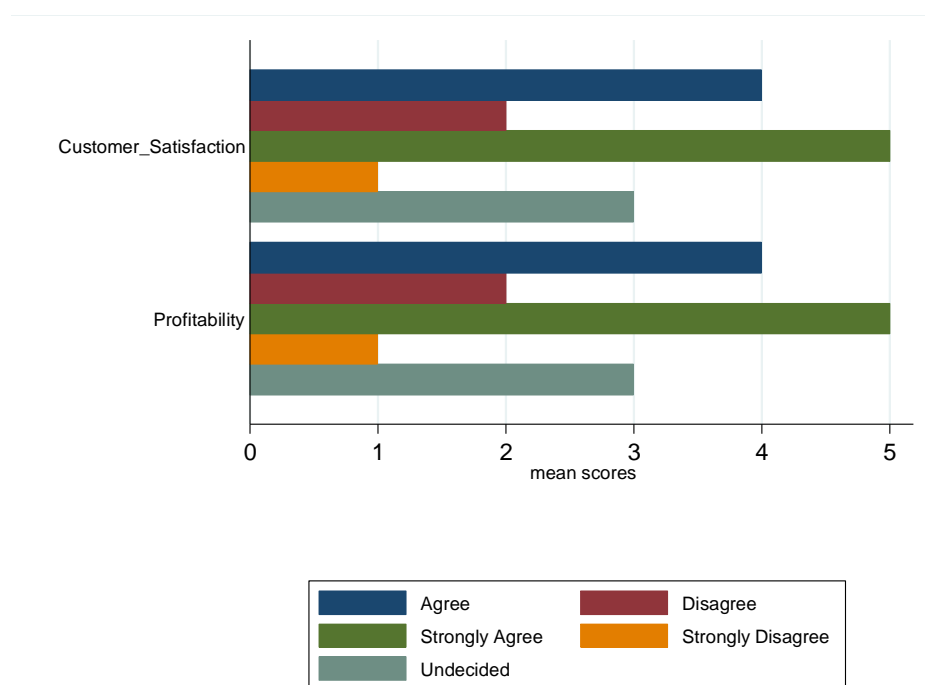
Table 4, presents the distribution of the respondents' rating response on what they perceived as effects of

compliance to ISPS code on measures of cargo operations. According to the statistical distribution, compliance to the code has improved cargo operation in terms of improved berth occupancy or utilization, cargo throughputs and vessel throughputs in that order of magnitude. As discussed in the preceding section, results from Table 4 are understandable given that additional facilities provided in compliance to ISPS code would improve efficiency in operational procedures related to ship and cargo handling operations. Thus, it can be argued that improved operational procedures, all things being equal, would attract more ship and cargo and increase berth utilization. The "*F*" statistic (4.25) in the ANOVA result's table has a significant *p*-value (0.014) showing

**Table 4** Response on effects of compliance to ISPS code on outputs of cargo operation.

Factors	Mean	Std. Dev.	Freq.
Vessel throughputs	2.356	1.576	174
Cargo throughputs	2.724	1.514	174
Berth occupancy	2.799	1.454	174
ANOVA model fitting information			
Source	SS	df	MS
Between groups	19.529	2	9.764
Within groups	1,192.626	519	2.298
Total	1,212.155	521	2.367
<i>F</i> statistic = 4.25			
<i>prob.&gt;F</i> = 0.014			

Source: author, data analysis based on field work.

**Fig. 2** Effects of ISPS Code's implementation on port user specific attributes.

Source: author, data analysis.

that significant variations exist in the mean rating scores according to the respondents.

Fig. 2 indicates perception of respondents on effect of compliance to ISPS code on their operational attributes. By visual inspection, we note that significant proportion of the respondents at least agreed that compliance to the code has improved their profitability and customer satisfaction. However, these could be regarded as indirect effects since, for example, it can be accepted that with introduction of additional security measures, the resultant cargoes protection could lead to

some cost savings. Also, introduction of ICT facilities (CCTV's) and other equipment could indirectly impact positively on ports effectiveness and performance and bring about customer satisfaction.

## 5. Conclusions

The object of ISPS code introduction is to improve security, prevent/mitigate incidence of terrorist related attacks on ship and ports/terminals. These are meant to be achieved through international and national established framework for joint coordination and

implementation of security measures: provision of risk assessment and mitigation criteria, assignment of roles and responsibilities for concerned parties, security information gathering/sharing and other maritime security measures. In practical terms, adoption of these measures has provided conducive environment for port operation. The major arguments made in this paper rest on the premise that additional port facilities and security measures undertaken in compliance to ISPS code requirements, would indirectly impact on effectiveness of port operation and hence improve performance. We explored the prospects of positive spillover effects following from compliance to the code and found that significant improvements occurred in ship operation attributes: cargo clearance time, documentation time, and ships' serving and turn round times. In terms of cargo operation attribute, the respondents reported that significant improvements were also recorded in cargo throughputs, vessel throughputs and berth occupancy. Apart from improvement in the port operation measures, the respondents stated that they derived satisfaction in port services and their profitability improved. The findings from this paper represent objective means of assessing post-ISPS code compliance effects on operational attributes of ports and port users. Thus, the port administration in Nigeria could continually evaluate and gauge outcomes of compliance to the code based on the assessment criteria applied in this paper. The question of cost involved in achieving compliance was not considered. Thus, future study on this theme could address issues related to funding (cost of implementation/compliance and sources of funding and how they could affect ports operational performance and user performance in the long term).

## References

- [1] Alderton, P. M. 2008. *Port Management and Operations*. 3rd Edition. London: Informa World.
- [2] Onwuegbuchunam, D. E., Aponjolosun, M. O., and Ajayi, O. S. 2016. "Assessment of the Effects of the Implementation of International Ship and Port Facility Security (ISPS) Code on Port Operations (A Case Study of Tin Can Island Port Complex)." *European Journal of Business and Management* 8 (35).
- [3] Mazaheri, A. 2008. "How the ISPS Code Affects Port and Port Activities." Unpublished M.Sc. thesis, University College of Boras, Sweden. <http://bada.hb.se/bitstream/2320/3579/Arsham%2520Mazaheri.pdf>.
- [4] Institute of Chartered Shipbrokers. 2011. *Introduction to Shipping*.
- [5] U.S. Department of Homeland Security, United States Coast Guard. 2017. "Port Security Advisory (3-17)." International Port Security Program U.S. Coast Guard. Available: <https://www.dco.uscg.mil/Portals/9/DCO%20Documents/InternationalPortSecurity/Port%20Security%20Advisory/Port%20Security%20Advisory%203-17.pdf?ver=2017-12-19-113153-393>. Accessed 01/04/18.
- [6] Abiodun, E. 2018. "US Coast Guard Hails Nigeria's Implementation of ISPS Code." *THISDAY*, Accessed April 1, 2018. <https://www.thisdaylive.com/index.php/2018/02/02/us-coast-guard-hails-nigerias-implementation-of-isps-code/>.
- [7] Aponjolosun, M. O. 2015. "Assessment of the Level of Compliance of Port Facilities in Implementation of ISPS Code." M.Sc. Seminar Presented to the Department of Maritime Management Technology, Federal University of Technology, Owerri.
- [8] Aponjolosun, M. O. 2018. "Assessing the Effects of Implementing International Ship and Port Facility Security (ISPS) Code on Port Operations." Unpublished M.Sc. thesis, Department of Maritime Management Technology, Federal University of Technology, Owerri.
- [9] UNCTAD. 2016. "Port Management Series: Linking Performance Indicators to Strategic Objectives." Vol. 4
- [10] Chung, K. C. 2013. "Port Performance Indicators." Accessed February 24, 2018. Available at [documents.worldbank.org/curated/en/303501468337289364/Port-perform-indicators](https://documents.worldbank.org/curated/en/303501468337289364/Port-perform-indicators).
- [11] UNCTAD. 2007. *Maritime Security: ISPS Code Implementation, Costs and Related Financing*. Report by UNCTAD Secretariat, March 14.
- [12] Onem, V. B. 2011. "Providing Port Resiliency through Technonlogy against Terrorist and Natural Threats: The ISPS Code and Emerging Technologies." M.Sc. thesis, Chalmers University of Technology, Goteborg, Sweden.



## Appendix A

**Table A1** Snapshot of data set for the study.

File Edit View Data Tools										
A1[145]										
	A1	A2	A5	B6	B7	B8	B9	B10	B11	B12
145	Clearing & Forwarding	B.Sc/HND	<5yrs	Disagree	Agree	Disagree	Strongly Disagree	Agree	Disagree	Strongly C
146	Clearing & Forwarding	B.Sc/HND	>15yrs	Strongly Agree	Agree	Strongly Disagree	Strongly Disagree	Strongly Disagree	Disagree	Strongly C
147	Clearing & Forwarding	B.Sc/HND	5-10yrs	Disagree	Strongly Agree	Undecided	Strongly Disagree	Strongly Agree	Disagree	
148	Haulage Operations	SSCE	>15yrs	Strongly Agree	Agree	Undecided	Agree	Strongly Disagree	Strongly Agree	Strongly C
149	Haulage Operations	B.Sc/HND	11-15yrs	Disagree	Agree	Strongly Agree	Strongly Disagree	Strongly Disagree	Disagree	
150	Clearing & Forwarding	B.Sc/HND	<5yrs	Disagree	Strongly Agree	Strongly Agree	Agree	Strongly Agree	Agree	Strongly C
151	Haulage Operations	OND/NCE	11-15yrs	Strongly Agree	Agree	Strongly Agree	Agree	Strongly Agree	Disagree	Ur
152	Shipping/Logistics	B.Sc/HND	<5yrs	Undecided	Disagree	Agree	Agree	Strongly Disagree	Strongly Disagree	Strongly C
153	Shipping/Logistics	B.Sc/HND	>15yrs	Agree	Strongly Agree	Strongly Agree	Agree	Strongly Agree	Agree	C
154	Shipping/Logistics	B.Sc/HND	11-15yrs	Strongly Agree	Undecided	Strongly Agree	Agree	Strongly Disagree	Strongly Disagree	Strongly C
155	Others	B.Sc/HND	>15yrs	Agree	Agree	Agree	Undecided	Undecided	Agree	Strongl
156	Haulage Operations	OND/NCE	11-15yrs	Strongly Agree	Strongly Agree	Strongly Disagree	Undecided	Strongly Disagree	Strongly Disagree	Strongly C
157	Shipping/Logistics	OND/NCE	5-10yrs	Agree	Agree	Agree	Disagree	Strongly Disagree	Agree	
158	Haulage Operations	B.Sc/HND	5-10yrs	Agree	Agree	Strongly Disagree	Strongly Agree	Undecided	Strongly Disagree	Strongly C
159	Shipping/Logistics	OND/NCE	<5yrs	Strongly Agree	Strongly Agree	Agree	Strongly Agree	Strongly Disagree	Agree	Ur
160	Others	OND/NCE	>15yrs	Undecided	Strongly Agree	Agree	Agree	Strongly Disagree	Strongly Disagree	Strongly C
161	Shipping/Logistics	OND/NCE	<5yrs	Strongly Agree	Undecided	Strongly Disagree	Agree	Undecided	Agree	Ur
162	Haulage Operations	SSCE	11-15yrs	Strongly Agree	Strongly Agree	Undecided	Agree	Strongly Disagree	Strongly Disagree	
163	Haulage Operations	SSCE	>15yrs	Agree	Strongly Agree	Strongly Disagree	Agree	Disagree	Agree	Strongly C
164	Shipping/Logistics	B.Sc/HND	>15yrs	Strongly Agree	Agree	Strongly Disagree	Agree	Strongly Disagree	Strongly Disagree	
165	Shipping/Logistics	SSCE	11-15yrs	Undecided	Agree	Agree	Strongly Disagree	Strongly Agree	Agree	Strongl
166	Others	M.Sc	>15yrs	Agree	Undecided	Disagree	Agree	Strongly Disagree	Strongly Disagree	Strongly C
167	Others	Others	>15yrs	Undecided	Strongly Agree	Agree	Strongly Disagree	Strongly Disagree	Strongly Disagree	
168	Clearing & Forwarding	Others	11-15yrs	Strongly Agree	Undecided	Agree	Strongly Disagree	Strongly Agree	Strongly Agree	Strongly C
169	Others	Others	>15yrs	Agree	Strongly Agree	Disagree	Agree	Strongly Disagree	Strongly Disagree	Strongl
170	Clearing & Forwarding	SSCE	>15yrs	Strongly Agree	Undecided	Strongly Disagree	Agree	Strongly Agree	Strongly Agree	Strongly C
171	Others	SSCE	11-15yrs	Agree	Strongly Agree	Strongly Disagree	Strongly Disagree	Strongly Disagree	Strongly Disagree	
172	Others	B.Sc/HND	>15yrs	Strongly Agree	Disagree	Undecided	Strongly Disagree	Strongly Agree	Strongly Agree	Strongl
173	Clearing & Forwarding	Others	>15yrs	Strongly Disagree	Strongly Agree	Strongly Disagree	Agree	Strongly Disagree	Strongly Disagree	
174	Haulage Operations	Others	>15yrs	Strongly Disagree	Strongly Disagree	Strongly Disagree	Strongly Disagree	Agree	Strongly Disagree	Strongly C

Vars: 75 Order: Dataset Obs: 174 Filter: Off Mode: Edit CAP NUM