THE IMPACTS OF INTERNATIONAL SHIP AND PORT FACILITY SECURITY (ISPS) CODE ON PORT USERS AT PORT OF TANJUNG PELEPAS

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MASTER OF SCIENCE

UNIVERSITI UTARA MALAYSIA

2014

THE IMPACTS OF INTERNATIONAL SHIP AND PORT FACILITY SECURITY (ISPS) CODE ON PORT USERS AT PORT OF TANJUNG PELEPAS

By

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A Research Paper Submitted to College of Law, Government, and International Studies, University Utara Malaysia in partial fulfilment of the requirements for the degree of Master of Science (International Business)

June 2014

DEDICATION

SPECIALLY DEDICATED FOR:

My Parents,
Mohd Daud Bin Sapea'ae
Lema Binti Tahir
For the love, faith, support, prayers, patience, sacrifices and kindness,
For the wishes, being very supportive, understanding, bring joy and happiness to me and helpful also for the moments of up and down together..

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ABSTRACT

International ports and sea transportation celebrating the tenth years of implementation of International Ship and Port Facility Security Code (ISPS) Code under International Convention for the Safety of Life at Sea (SOLAS) 1974. Therefore, this study aimed at identifying the impacts of ISPS Code implementation on port users at Port of Tanjung Pelepas (PTP). The method used in this study was qualitative using interview as the means for data collection. The interviews were done with respondents based on three categories of port users namely freight forwarder, shipper and logistic company. Through the qualitative data analysis, it showed that the impacts of ISPS Code implementation at PTP have direct impacts such as cost increased and changes in procedure on port user organization and activities as any port user is compulsory to comply with port regulations to ensure port security. This study found that the code implementation is not significantly affecting the port user performance. This study suggests that there is a need to further the study of ISPS Code in port in the future by taking into account more different perspectives of the diversity of the parties involved in port operations.

Keywords: Port Studies, Port Users, Port Security, International Ship and Port Facility Security (ISPS) Code, Port of Tanjung Pelepas (PTP)

ABSTRAK

Pelabuhan antarabangsa dan industri pengangkutan lautan meraikan tahun kesepuluh pelaksanaan Kod Keselamatan Fasiliti Kapal dan Pelabuhan Antarabangsa (ISPS) di bawah Konvensyen Antarabangsa bagi Keselamatan Nyawa di Laut (SOLAS) 1974. Oleh itu, kajian ini bertujuan untuk melihat kesan-kesan pelaksanaan Kod ISPS kepada pengguna pelabuhan di pelabuhan Tanjung Pelepas (PTP). Kaedah yang digunakan dalam kajian ini adalah pendekatan kualitatif dimana kaedah temubual dilakukan dengan pemberi maklumat berdasarkan kepada tiga kategori pengguna pelabuhan iaitu ejen penghantaran, pengeluar dan syarikat logistik. Melalui analisis, temuan kajian mendapati kesan-kesan pelaksanaan Kod ISPS ke atas pengguna pelabuhan adalah kesan secara langsung seperti kenaikan kos dan perubahan dalam prosedur import dan eksport. Namun demikian, kajian ini mendapati kesan pelaksanaan Kod ISPS ini tidak menjejaskan prestasi organisasi pengguna pelabuhan. Kajian ini mencadangkan supaya kajian-kajian berterusan dibuat berkenaan dengan Kod ISPS di pelabuhan dengan mengambil kira perspektif yang pelbagai yang melibatkan kepelbagaian pihak-pihak di pelabuhan.

Kata Kunci: Pengurusan Pelabuhan, Pengguna Pelabuhan, Keselamatan Pelabuhan, Kod Keselamatan Kapal dan Pelabuhan Antarabangsa (ISPS), Pelabuhan Tanjung Pelepas (PTP)

ACKNOWLEDGEMENT

In the name of Allah, the Most Gracious and Most Merciful. Praise to Allah S. W. T. the Creator and Guardian of the universe. Praise and peace be upon Prophet Muhammad S.A.W; the last messenger of Allah, his family and his companions, porn whom we gain the enlightenment.

My greatest gratitude to Allah SWT, the Grandest and Almighty, Most Gracious and the Most Merciful for giving me the chance, time, and ability to perform this study and for all the chances He has given to me until now. All my efforts will end for nothing without His blessing. First and foremost, a very special 'Jazakallahhu Khairan Kathira' is extended to my supervisor, Dr. Muhammad Subhan for his supervision of this research. His ideas, guidance, advice, understanding and tolerance have been an enormous help throughout the process in completing this research also Dr. Sabariah Yaakub for reviewed my research paper.

I wish to express my utmost appreciation and gratitude to my parents, Mohd Daud Bin Sapea'ae and Lema Binti Tahir for their sacrifices, patience, love, caring, support, prayer, wishes, faith, and understanding that they have given to me throughout my life. Thanks also to my family Mohd Rizal Bin Mohd Daud, Mohamad Rifa'at Bin Mohd Daud, Noraini Binti Hamzah, Nur Syifa Hanna Binti Mohd Rizal, Nur Safwa Hanni Binti Mohd Rizal, Faradina Binti Parmin for the joy, happiness, support, encouragement and prayers.

Last but not least, deepest thanks to all my friends especially Izatul Shima Iberahim, Kamarita Karim, NurInsyirah Saim, Hidayah Sharif, Siti Hamira Hamzani, Anisah Ghani and those who are involve either directly or indirectly and also help myself during this research progress until it is finish to the end. Thanks for the friendship, moments and keep supporting me.

Thank you
Rafikah Binti Mohd Daud, June 2014

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UNCTAD	United Nation Conference on Trade and Development
IMO	International Maritime Organization
ISPS	International Ship and Port Facility Security
SOLAS	International Convention the Safety of Life at Sea
EU	European Union
PTP	Port of Tanjung Pelepas
CSO	Company Security Officer
SSO	Ship Security Officer
SSP	Ship Security Plan
PFSO	Port Facility Security Officers
SSA	Ship Security Assessment
SSP	Ship Security Plan
ISSC	International Ship Security Certificate
PFSA	Port Facility Security Assessments
PFSP	Port Facility Security Plan
RSO	Recognized Security Organization
DA	Designed Authority
MPA	Maritime and Port Authority of Singapore

CHAPTER 1

INTRODUCTION

1.1 Background of study

Nowadays, maritime industry plays an important role especially in international trade and national security for each country. Maritime industry is the driver of countries to achieve globalization era and economy of scale. According to United Nations Conference on Trade and Development (UNCTAD) Review (2012) Report, around 80 percent of global trade by volume and over 70 per cent by value is carried by sea and is handled by ports worldwide. As developing countries towards to developed nation, Malaysia also depends on maritime industry through as one of the important aspects of international trade.

In international trade, minimize the cost is important because to reach a high profit margin and through the medium of transportation infrastructure which movement of goods efficiently effective all over the world. By air, land and sea, all logistics activities have advantages and disadvantages in term of cost of delivery goods from point of origin to point of consumption. Based on UNCTAD Review, it showed sea transportation as the main transport in international trade.

From the data Department of Statistic Report (2012), total Malaysian export income increased every year with the value on year 2012 was RM 702.2 billion compared with previous year on 2011 was about RM 697.9 whereas total of import was RM 607.4 billion in year 2012 and in 2011 was RM 573.6 billion. The balance of trade was dropping in the year 2012 to RM 94.8 billion meanwhile in 2011 it was RM 124.2 billion. Trade activities related to logistics and maritime industry were involved as one of the mode of transportation. In fact, ocean transportation was highly demanded in Malaysia trade industry because of size of its external trade sector and high dependence on foreign trade.

Shipping and ports were links directly with maritime industry in international trade. Through the trade activities, Malaysia government based on national policy encourages shipping industry to self-sufficiency economy. The reason is to prevent or reducing outflow of freight payment to non-national shipping lines. Besides that, government wants to promote more national cargo on national flagged ship in order to growth national merchant fleet (Osnin, 2005). On the 2012 Review of Maritime Transport showed number of ships in Malaysia was 1,449 and tonnage 10 895 dwt compared with 2008 was just only 1,150 ships and tonnage 9448 dwt.

In international trade, this figure shows positive side of ocean transportation and the capabilities Malaysia ports to handle all the international trade activities were needed by traders from local exporters or foreign importers. History of Malaysia successful

trading places during Malay Sultanate era proves it that Malaysia has advantages in the maritime industry.

Since ancient era of maritime in Malaysia, starting with Malacca Kingdom on 15th Century it became one of the important ports in Southeast Asia at that time. As main passage for ships that carried spices from Middle Asia to Ryukyu Island or now called Japan, Malacca attracted traders from all over the world to stop and merchant there. The facilities and accommodation offered by Melaka kingdom to merchant also with the great political stability were key of success for port in Malacca. During that time, all maritime law and regulation imposed by ruler of Malacca kingdom known as *Undang-undang Laut Melaka*, the earliest manuscript in Malay Archipelago about sailing and maritime (Mardiana, 2008).

It showed a century ago, the regulation, code or laws was imposed into the maritime industry for a long time. Now under International Maritime Organization (IMO) there have been several of regulations or convention about security related into maritime field. Every country as members of IMO compulsory to signed the treaties or convention under IMO. Malaysia ports and shipping jurisdiction fall under the Ministry of Transport and as a member is became responsible to implement the code or regulation regarding with maritime field. Due to the reasons, Malaysia ports now practice and implemented International Ship and Port Facility Security (ISPS) Code into their framework.

In the maritime industry, port was one of transportation infrastructure in international logistics that allow goods to move efficiently within a country and between countries (David & Stewart, 2010). Port was used in logistics activities because of the size, cost and convenient method to export and imports goods from all over the world. As critical component of global transportation infrastructure, port was exposed to any kind of threats. Challenges or issues such as natural disaster, piracy, security measures and potential obstacles needed to overcame or face by players in maritime industry (Lee, 2007), all that related with vulnerabilities in maritime sector.

To enhance security in maritime industry especially ports, there have introduced port security management, main objectives was provide maritime industry professionals, government law enforcement and regulatory officials, and especially port operators, users and etc with basic awareness and understanding of security management in the port facility environment (David and Stewart, 2010).

The security issues in maritime industry have been emphasized since 9/11 tragedy because of the vulnerability in maritime sector particularly in security part. Port was door entrance for two countries especially in trade and security issue being concerned since port was easy target for terrorist to use as a medium to attacks.

In the maritime industry, those who's involves or works in maritime line facing any kinds of threat such as smuggle a Weapon Mass Destruction (WMD) inside the vessel and using the arsenal to outbreak another ship or aimed port infrastructure like

bridges, harbors or port facilities, blockade a port or a marine passage by dunking a vessel, or bombing passenger ship by exploding a secreted bomb aboard or an explosive-laden craft (Mazaheri, 2008). There are high risks for those who are involved in maritime sector because they can't predict what will happen next. If one of facilities breaks down or stops the operation it will affect port activities and very costly.

The reaction of 9/11 incident, United States (US) government enforce International Maritime Organization (IMO) to set up new regulation under International Convention the Safety of Life at Sea (SOLAS) 1974 that signed by 148 countries was outline the safety requirement of merchant ship owners must put in place in section "Special Measures to Enhance Maritime Security" (David and Stewart, 2010) has been known as International Ship and Port Facility Security (ISPS) Code to protect the international maritime transport sector against the threat of terrorism (Hesse & Charalambous, 2004). Acted as regulatory body in maritime industry, IMO reaction on 9/11 incident with develop the new requirements on security measure where involve of co-operation between governments, government agencies, local administrations and shipping and port industries (Hesse & Charalambous, 2004). All ports and ships of countries signed under SOLAS was compliance with ISPS code by June 2004.

To adopt new security measure IMO amendment Chapter XI of the International Convention for the Safety of Life at Sea 1974 (SOLAS) in which developed a new

Chapter XI-2 on Special Measures to Enhance Maritime Security and ISPS Code. Under the amendment, SOLAS Chapter XI was divided onto two parts: Chapter XI-1 for Special Measure to Enhance Maritime Safety and Chapter XI-2 for Special Measures to Enhance maritime Security. In principle, Chapter XI-2 incorporates new regulations for ships and port facilities requirements. In ISPS Code or Regulation Chapter XI-2/2 has two sections which Part A was mandatory section whereas Part B recommendatory section (Hesse & Charalambous, 2004).

Furthermore, the new security measure implement by IMO based on the basic understanding securing the security of ships and port facilities where it was basically a part of risk management activity and to determine what security measures are appropriate, an assessment of the risks must be made in each particular case (Hesse & Charalambous, 2004).

According to Hasse and Charalambous (2004), ISPS Code purpose is to provide a standardized, consistent framework for evaluating risk, enabling governments to offset changes in threat levels with changes in vulnerability for ships and port facilities. This code only applies to passenger ships and cargos of 500 gross tonnage and upward, including high speed craft, mobile offshore drilling units and port facilities serving such ships engaged on international voyages. Meanwhile fishing vessels or cargo ships below 500 gross tonnage did not apply ISPS Code.

ISPS Code has accepted worldwide by all over the ports adapt the new security initiatives. This new security measure is also implemented by European Union (EU) country members in order to get an improved security standard in sea transportation. EU with one of the bigger economic region needs to ensure security part was efficient in order to protect the economy and region. The European Union has to ensure that everything related to the juridical security agenda doesn't violate the freedoms and privacy of the residents (Meau, 2009).

Regulation number 725/2004 dated 31 March 2004 assimilates the revisions to the SOLAS Convention and also the ISPS Code in the European Community law as mandatory rules (Meau, 2009). The new security measures enforced in European Union on 1 June 2004 to enhance the security in sea line and port facility all over Europe. It is important to note here that, in EU context, the security in sea transportation sector may not have implication or a sort of interference in the privacy of the people.

ISPS Code works where every member state have applied all ISPS Code requirements such as getting authority qualified into their port for maritime security, besides the authority there are also someone from the port state control whose have qualification to control security certificates known as examiners. Furthermore in European Union (EU) not all port facilities was mandatory to adopt the new security measure or ISPS Code, only international ports that link with international mother vessels of involving government in new security measure has the right on do the basic

of the maritime security evaluation to choose another measures to certify the safety of these ports. As European Union member, all compliance parties are compulsory to handle all ships that required request approval that come into a port facility based on security rules (Meau, 2009).

After all over the world adopt new security measures including EU and other countries, the implementation of new security measures also enforced to Malaysian ports such as Port Klang, Port Tanjung Pelepas and others. As one of the main ports, Port Tanjung Pelepas (PTP) exposed to the threat of maritime security with status among top 20 of world leading container ports (Container Management Magazine, 2013). PTP invest more than RM 1 billion to make port more competitive and efficient (The Star, 2012). The more cargos handling by ports the more risk they are, because of high traffic flow of cargos or containers the higher chances for threats.

Port Tanjung Pelepas handled 7.7 million TEUs in year 2012 growths 3% than 2010 (Ascutia, 2013). In order to secure his perimeter, Port Tanjung Pelepas applied ISPS Code in their practices where all ports in the world subjects to implement new security code. PTP adopted ISPS Code on 29th June 2004, after being issued a Statement of Compliance by the government of Malaysia (PTP, 2006).

This study is based on code that implement by PTP which observe on port activities and the effects toward their port users. Previous studies mostly identified from port managerial perspectives in new security measures of maritime industry. The

effectiveness and impacts of execution of new code towards port has been studied by many scholars. This research focuses on the impacts of implementation new code at port based on three types of port users' perspectives namely logistic companies, freight forwarders and shipping company.

1.2 Problem Statement

The vulnerability of maritime security sector became main reasons why IMO adopted a new security measure under SOLAS to ensure they avoid exploitation from terrorist group towards maritime industry (Fiona, 2005). Since the tragedy 9/11 happened there are several incidents involved by terrorist group in maritime industry that threat security part. In October, 2000 at Yemeni port, small boat has been boomed by Al-Qaeda terrorist group where at that time USS Cole berth at same port and causes 17 sailors died and 39 of them were injured (Mazaheri, 2008).

As a results, new measurement imply by maritime industry was ISPS Code were into force on 1 July 2004 (MarineLink, 2004) to enhance security in maritime industry. As new code has been introduced, many changes happened into maritime industry from the shipping line into port authorities and governments. But among them as parties involved directly with the implemented ISPS Code there have some other parties that not involved directly with ISPS Code.

Inside the port, several of logistics activities occurred. It involved many parties such as supply chain line, factories, and others customers as companies that deal with port

authorities. If port authorities enforced any law or regulation it will affect them direct or indirect. It is same if any changes happened or new amendment in the regulation, other parties such as port users also will affect. In this study, the issues focus more on port user perspective rather than port itself because in Malaysia rarely seen studies about port user perspective in maritime security aspect.

Previous study has been conducted by academic scholars to observe and identified the effects of implementation ISPS Code. Financial cost was the main impact toward implementation of ISPS Code especially for the ports, but that factors also involved port users. Another factor of effects implementation ISPS Code was on each party have own perspectives or different interpretation toward new security measures. Even though as members of IMO, each country that applies ISPS Code have different framework form each other. As examples Malaysia framework with other countries framework of ISPS Code was different a little bit even adapt the same regulation.

Based on academic writing, there have positive and negative impacts of implementation ISPS Code. Many scholars study the effect of implementing ISPS Code from various aspects. There are many studies done by academics on vulnerabilities of maritime security sector on effects of new code towards port activities. The Code more focus on port perspectives although at the same time port users involved in port activities also effects with new rules and regulation. Even though the ISPS code more emphasize the role of port security and shipping line, port

users' also important players in maritime sector and logistics. When new amendment of rules and regulation adopted there must be have effects on them too.

1.3 Research Objectives

In this paper, there are several objectives of the research have been listed to relate with the implication of ISPS Code:

1. To understand current condition of ISPS Code implementation at PTP.
2. To identify the impacts of ISPS Code implementation on port users.
3. To investigate the contribution of ISPS Code implementation by port users towards the port effectiveness at PTP.

1.4 Research Questions

There are several questions in the paper relate to the research area study:

1. How does the current situation of port users after the execution new maritime security measure (ISPS Code)?
2. What are the impacts of ISPS Code implementation on port users?
3. Does ISPS Code implementation by port users contribute to PTP port effectiveness?

1.5 Significant of Study

This study is significant for the organization to determine what the impacts of implementation of International Ships and Port Security (ISPS) Code on port users such as logistic companies, freight forwarders and shipping company. Besides, organization can obtain useful information from this study and use it to enhance their performance and give the best services to port users.

The study could be practical to use by port users to seen the changes that required them by following or adopted a new security measures code. In addition, it also can be used by other practices in maritime industry especially logistics field.

Public and students readers also benefited from this study because it gives knowledge and understanding about ISPS Code in detailed especially from port users perspective. It can use for further information particularly in logistic and business field.

Theoretically, this study contributes to maritime security studies and can be as a reference or guideline for the future this studys to carry out their study. In the context of the this study, the this study is able to enhance and gain knowledge more about maritime studies and logistics.

1.6 Conceptual Definition

This sub-chapter discusses the terms that this study used to carry on the study:

1.6.1 International Ship and Port Facility Security Code

It is an amendment to the Safety of Life at Sea (SOLAS) Convention (1974/1988) on minimum security standardization for ships, ports and government agencies. Enforced in July 2004, it defines responsibilities to governments, shipping companies, shipboard personnel, and port or facility personnel to "detect security threats and take preventative measures against security incidents affecting ships or port facilities used in international trade" (IMO.org, 2013).

The code applies for ports and ships in maritime industry for security purpose. The code enforced within port perimeter only and every port has own interpretation or practices in ISPS Code.

1.6.2 Port Users

Port users can define as any person or entity in the port at any time, using facilities and equipment, which is bound by lease or contract which they promise to comply with these Port Standards and Procedures and who is the owner, charterer or master of any vessels in the port (ESPL, 2013). It involve such as third party logistics (3PLs) and etc.

1) Third Party Logistics

US Department of Transportation define 3PLs as a company that provides logistics services to other companies for some or all of their logistics needs. It typically includes warehousing and transportation services. Most 3PL's also have freight forwarding licenses.

It can consider that 3PLs was third party supply of logistics related operations between traders by an independent organization. They are external suppliers that perform all company logistics functions.

2) Freight Forwarders

According to David and Stewart define freight forwarder as a company that specializes in shipping cargo on behalf of shippers (exporters or importers). It's a "travel agent" for freight, finding the most appropriate itinerary and carrier, given the shipper's objectives.

From operational view a person whose business is to act as an agent on behalf of the shipper. A freight forwarder frequently makes the booking reservation.

3) Shipper

The party to an international transaction that is responsible for arranging the transportation of the goods. Depending on the Incoterm used and on the leg of

the journey in consideration, the shipper is either the exporter or importer (David and Stewart, 2010).

The person or company who is usually the supplier or owner of commodities shipped. They produced products and need to use logistics factors to deliver goods from one place to another place.

1.7 Scope of Study

The scope of this study covers from Johor Port Authority (LPJ) because they are regulatory body that oversees operations at the Port of Tanjung Pelepas in Gelang Patah, Johor and Port of Johor at Pasir Gudang. The responsibilities LPJ was setting performance standards to ensure port operators provide facilities and services efficiently and effectively in accordance with International Standard, control port development and property affairs by ensuring that port operators carry out development of the port according to the Port Master Plan and the National Development Policy and limit safety in Johor waters especially from the threat of piracy, smuggling and so on.

It involved the several categories port users such as 3PLs that perform all company logistic functions that consists freight forwarder and shipper that used service from Port Tanjung Pelepas, Johor. They are links direct or indirect with port authority's standard procedures and operation (SOP) especially in term of law and regulations. The ISPS Code implementation might have direct and indirect impacts to them.

CHAPTER 2

LITERATURE REVIEW

This chapter will highlight previous related studies about the issues. In first part, this chapter explains in details about ISPS Code. This explanation then will be followed by a comparative review of ISPS code implementations in various places and impact of ISPS code implementation with a focus on UNCTAD papers

2.1 International Ship and Port Facility Security (ISPS) Code

The code basically covers the following scope in implementing the security measures as general objectives listed by IMO (Mazaheri, 2008):

1) To establish an international framework, involving co-operation between contracting government, government agencies, local administrations and shipping and port industries to detect and assess security threat and take preventive measures against security incidents affecting ships and port facilities used in international trade
2) To establish respective roles and responsibilities of all these parties concerned, at the national and international level for ensuring maritime security.
3) To ensure the early and efficient collation and exchange of security related information.
4) To provide a methodology for security assessment so as to have in place plans and procedures to react to changing security level.

5) To ensure confidence that adequate and proportionate maritime security measure are in place.

As mentioned earlier, ISPS Code was divided into two parts. Part A was mandatory and Part B was recommendation or non-mandatory. Part A contains 19 sections such as definitions, application, tasks of involving parties and practical data of the requirement ISPS code (Mazaheri, 2008). These parts were required to know by involving parties which activities must be engaged.

In Part A, it defines one of the sections about responsibilities of the business, ships, seaport capacity, and contracting of regime (Mazaheri, 2008). For all operating shipping company and port industries applied with ISPS Code need to appoint *Company Security Officer (CSO)* and *Ship Security Officer (SSO)* for each of its vessel (Trelawny, 2005). *SSO* was the person in charge or master on board ship for the security purpose including implementation and maintenance of *Ship Security Plan (SSP)* and must cooperation with *CSO* and *Port Facility Security Officers (PFSO)*. Responsibilities of *CSO* were conduct training and drills as one of the requirement in Code also ensuring that a *Ship Security Assessment (SSA)* is undertaken and implemented *Ship Security Plan (SSP)* for each ship according to *SSA* (Trelawny, 2005). The International Ship Security Certificate (ISSC) can be issued after the SSP was prepared and approved (Mazaheri, 2008).

Ship Security Assessment (SSA) defines as vulnerable part in ship structure or operation (Mazaheri, 2008). Based on Part A in ISPS Code, SSA includes an on-scene security review that consider such as individuals, movements, services and operations necessary to protect for fulfilled when assessing the security of the vessels there have four elements (Meau, 2009):

1) Information of current security initiatives, processes and operations and classify was really important.
2) Key ship board operations that are vital to defend must be recognized and assessed.
3) The potential dangers to the key ship board operations must be acknowledged and also the probability of their incident, for the reason to create and main concern security measures.
4) The disadvantages of mankind aspects in the organization, guidelines and processes must be identified.

Ship Security Plan (SSP) was plan to ensure all measures on board have been properly designed to protect the ship, persons on board, cargo, cargo transport units and ships stores to prevent from any security threats (Mazaheri, 2008). In SSP indicates the normal level of risk and the minimum level of security preparedness known as *Security Level 1*. For the next level in Security Level 2 it was additional measures with heightened risk of a security incident and in *Security Level 3* was probable or imminent risk of a security incident and should only be applied in exceptional circumstances (Trelawny, 2005).

According to IMO similar requirements apply upon Port Facility Operators. *Port Facility Security Officers (PFSO)* is responsible for ensuring *Port Facility Security Assessments (PFSA)* is conducted and *Port Facility Security Plans (PFSP)* are developed and implemented. It showed, ISPS Code requirements only involve and applied directly into port facilities and vessels.

Port Facility Security Assessments (PFSA) is a risk analysis of all aspects of a port facilities operation in order to determine which parts are exposed to threats. Quite similar with SSA that has four elements that should include in assessment (Mazaheri, 2008):

1) Identification and assessment of important assets and infrastructures those are important to protect.

2) Identification of potential threats to the assets and infrastructures and the likelihood of their occurrence along with their consequences, in order to establish and prioritize security measures.

3) Identification, selection and prioritization of counter measures and procedural changes and their level of effectiveness in reducing vulnerability.

4) Identification of weaknesses, including human factors in the infrastructures, policies and procedures.

Same with SSA, PFSA should be reviewed and updated periodically particularly when major changes occurred in port facility. After PFSA was done, Port Facility Security Plan (PFSP) was prepared based on PFSA. PFSP was plan to ensure the application of measures designed to protect the port facility and vessels, persons, cargo, cargo transport unit and ships stores within the port facility from risk of security incident (Mazaheri, 2008). The person in charge of development, implementation, revision and maintenance of PFSP was PFSO.

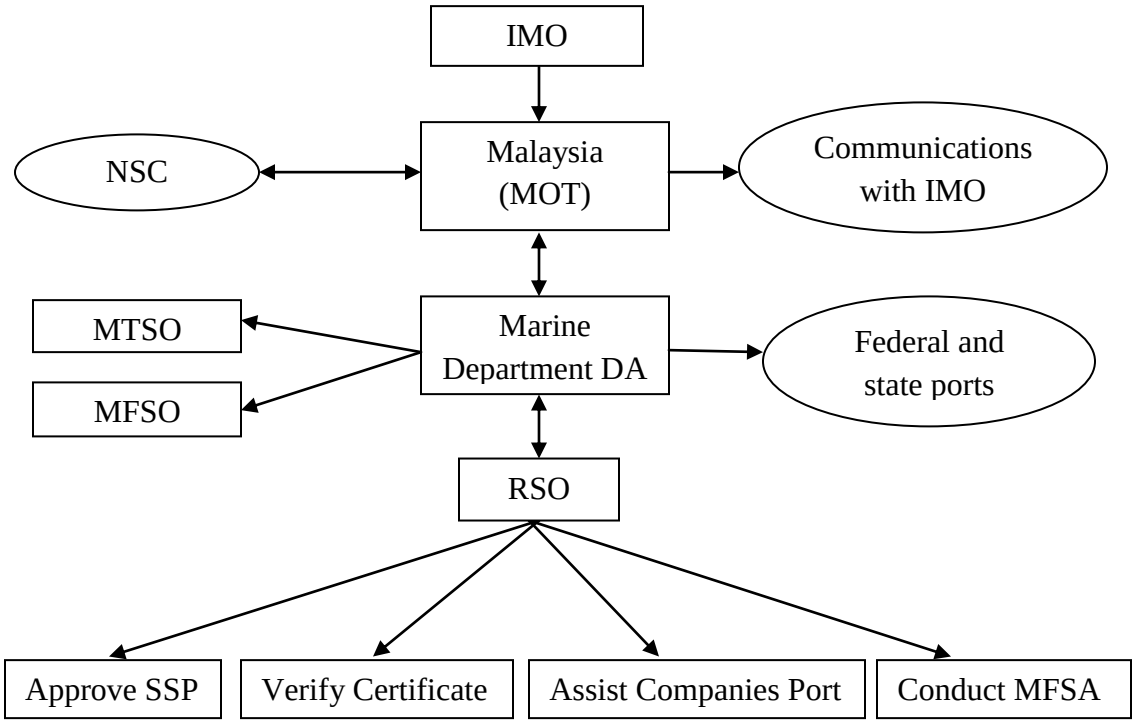
Under Part A of ISPS Code, there has code of Contracting Government that can establish Designed Authorities within Government to undertake their security responsibilities (Trelawny, 2005). The responsibilities of Contracting Government were to set appropriate security level and provide guideline for protection any security threats (Meau, 2009). Others tasks were required them to approve PFSA and PFSP, determine which ports used PFSO and exercise control and compliance measures according to SOLAS Regulations. Designated Authorities also can appoint representative to undertaking certain responsibilities such as to *Recognized Security Organization* (RSOs) outside government (Trelawny, 2005).

Part B was specific guidelines and the detailed how to carry out responsibilities mandated from Part A. In this part contains guidance on areas of potential vulnerability and control methods to address these in security plans. A protective measure for ships alongside at port facilities was the main focus of Part B guidance (Meau, 2009). Threats posed by ships to port facilities are not specifically addressed, however, those conducting PFSPs are advised to consider adapting the guidance to address such threats.

2.2 Comparative Study in Different Countries on the Implementation of the ISPS Code

Each country applied ISPS Code have different interpretation of new security measures from each other. The implementation was different and not in the same way. It became clear that not every contracting government has same improvement in implemented new security measure. In this study, it will compare several studies about countries that implemented ISPS Code.

2.2.1 Implementation ISPS Code in Malaysia



Source: The ISPS Code Implementation Structure in Malaysia (Gunasekaran, 2012, p. 62)

In Malaysia circumstance, Malaysia ports and shipping fall under jurisdiction of Ministry of Transportation (MOT) (Osnin, 2005). The word of 'port facility' as proposed by the Code has been changed to 'marine facility' the combination area beyond port and ship interface as prescribed by Section 249A, Act A1316. The National Security Council (NSC) as the chairman of the security committee and shared policy direction with MOT, which under MOT was Marine Department or known as MARDEP act as Designated Authority (DA) with implemented the policy and carried responsibilities for monitoring and enforcing the code in all Federal and State ports (Gunasekaran, 2012).

Maritime Transport Security Officer (MTSO) and Maritime Facility Security Officer (MFSO) were required to fulfill all instructions given by DA, and both of them subjected to DA preliminary audit of the security assessment and plan before receiving the statement of compliance or known as International Ship Security Certificate (ISSC) to certify that the port facility is ISPS compliant (Gunasekaran, 2012). ISSC was valid for five years and issued to the vessel once SSA and SSP have been approved by RSO on behalf of administration.

In Maritime Security and ISPS Code Circular, MSC/Circ 1074 was amended to incorporate with certain Malaysia requirements which were then used to approve Recognized Security Organization (RSO). There have seven approved RSOs take charges of issuing the ISSC for vessels through various auditing and verification process in Malaysia such as Ship Classification of Malaysia, Det Norske Veritas,

American Bureau of Shipping, Llyods Register, Bureau Veritas, Korean Register and Nippon Kaiji Kyokai (Osnin, 2005).

SSO was appointed by company as master of the ship in implementing SSP and ensure the effectiveness of implementation SSP. The Officer also needed to check on regular basis any security equipment if it was functions well or not including Ship Security Alert System (SSAS). SSAS location only known by master, CSO and other officer identified by them. CSO and SSO in Malaysia need to attend approved training courses at any approved training centre and after fulfill the requirement they will be issued by certificate from MARDEP.

From port authority's side, DA was required to identify port facility that is required to comply with ISPS Code. PF need to identify PFSO that requires to attend an approve PF course conducted by approve maritime training institution and get certificate issued by MARDEP. PFSO will be liaison person for any security concern of ship while in the PF and require answering any inquiry raised by the ship on authentication of any government worker such as custom, immigration, port state control or other officers boarding the ship. Previously, before implement ISPS Code PF in Malaysia required to notified 48 hours before the arrival of the ship and their intention. Now with implementation ISPS Code, ship need provided additional information relating security details of the ship.

2.2.2 Implementation ISPS Code in Europe

After IMO announced on implementation ISPS Code on 1st July 2004, European Union (EU) members were subject to adapt the regulation. Follow the ISPS Code regulation in SOLAS Chapter but have slight different from others. According to Doosje, for the future standardization in sea transportation security aspect E. U member were mandatory to adopt recommendatory part B of the Code (Meau, 2009).

Alluding to Witlox, port in Belgium and Netherlands implement almost the same procedure of ISPS Code and there is an interchange of data of contact point and process. In Belgium, central national authority known as federal security committee, the functions of federal committee was hold the duty and charge to match the ISPS Code for the implementation of the domestic and worldwide guidelines regarding the port facilities security (Meau, 2009).

The national security committee has several duties of responsibilities such as consult the contracting government regarding the adoptions of new security measure in maritime security to ensure facilities in port was in the good level and secure. They also have to responsible to coordinate studies concerning security problems and provide all information regarding port facility security plans and maritime security as person in charged or contact point for all those information.

2.2.3 Implementation ISPS Code in Singapore

Known as international maritime centre and the busiest container port in the world, Singapore maritime industry was important and contributes almost seven percent of Singapore gross domestic product (Beckman, 2009). Thus, Ministry of Transport under Maritime and Port Authority of Singapore Act created a statutory board in 1996 known as Maritime and Port Authority of Singapore (MPA) as responsible organization for safeguarding Singapore's maritime and port interests in the international arena. MPA wasn't governmental body it more recognized as national sea transport representative and performance as the government's consultant regarding the issue on maritime transport, marine and port services, and facilities (Beckman, 2009).

Furthermore, Singapore agency that responsible for implementing all IMO conventions was Maritime and Port Authority of Singapore (MPA). As one of the member in IMO and represent Singapore interest, they actively participate in IMO meetings and had elected as Council member since 1993 (Beckman, 2009). After the incident 9/11, IMO implemented new security measures and MPA as hold authority power in Singapore maritime below the Merchant Shipping Act and the Maritime and Port Authority Act, they started to implement the ISPS Code in starting year 2002 (Beckman, 2009).

Early in 2002, official and authorized professionals from the MPA, they started to drafting procedures to adopt the 2002 SOLAS revisions with the consultation

Legislation Division of the Attorney General's Chambers. Following the common practice in Singapore, MPA started to issue circulars and presented seminars beginning in 2003 to guiding ship owners and port facility operators about the SOLAS amendments in order to ensure that all affected persons and companies could be in full compliance by the date they would enter into force on July 1, 2004. (Beckman, 2009).

Thus, through the action taken by MPA to prepare for the implement new security measures they appointed several Recognized Security Organization (RSO) which eight for ships and seven for port facilities (MPA, 2004). RSOs will be authorized to approve ship security plans, conduct ship security audits, and issue International Ship Security Certificates (ISSC) to Singapore ships in accordance with the ISPS Code on behalf of the MPA (MPA, 2003). MPA will be warning any party who involve in ISPS code especially vessels that did not comply with the code starting on July 1, 2004 with new security measure requirements will be facing several problem such as suspending the vessel, arrested the vessel, and remove the vessel from enter into the port (MPA, 2003).

According to Port Marine Circular No. 26 of 2003, SOLAS Chapter XI-2, Reg. 10—Requirements for Port Facilities, July 9, 2003, it stated that consulting the port authority and port operators in additionally new security measure of port facilities and ship adopted by the 2002 SOLAS revisions, port operators are necessary to enhance and preserve a port facility security design on the basis of a port facility security

valuation and to conduct drills and exercises with abide to the port facility security plan. The port operator and officers are recommended to designate port facility security officers who are to undergo training in maritime security in accordance with the guidance in Part B of the ISPS Code (MPA, 2003).

2.3 Cost of Implication ISPS Code

Due to the amendment under the International Convention for the Safety of Life at Sea (SOLAS), 1974 requirement about new security measure, cost factor plays important role in implementation ISPS Code. The expenditure spend by involves parties for compliance and implement the Code was some problem in applying ISPS Code. The expenditure on equipment at port facilities are the major in early expenses in implementation ISPS Code followed by investment on infrastructures. According to Mazaheri (2008), mostly ports invest on security equipment like fences, gates and security systems and others such training and hiring personal where larger ports need to spent more on security matters, as they handle more cargos and deal with more ships.

Below this table from United Nations Conference on Trade and Development (2007) report for initial costs of ports in implemented ISPS Code. It is showed and clarifies on details that the expenses regarding the equipment are the major cost factor for the ports (35%), trailed costs on the infrastructure (26%). Personal expenses only spend 14%, such as staff that involve in new security measure requirements to comply of the ISPS Code and training and the annual drills cost only 8% from initial cost. The

transition occur in Security Level 2 and 3 also cause an increased cost when there have operation fixed with level 1.

Table 1:

ISPS Code-related Initial Costs of Ports: Cost Factor Distribution

No	Descriptions	Percentage (%)
1	Equipment	35
2	Infrastructure	26
3	Personnel and staff time	14
4	Training, drills and exercises	8
5	ICT	7
6	Administrative	6
7	Operations/Procedures	2
8	Security level 2 & 3	2

Source: United Nations Conference on Trade and Development, Maritime Security: ISPS Code implementation, costs and related financing, Report by the UNCTAD secretariat, 14 March 2007, p. 14

Nevertheless, the survey on annual costs of ports was different from initial costs of ports. If in initial cost equipment was the first, in the annual expenses personnel costs spend 47% of the annual costs investment on new security measure. Second, were training, the drills and exercises factor. Therefore, in this study assumed that the ISPS Code implementation causes an extra expense on employment factor. It showed by the table below this:

Table 2:

ISPS Code-related Annual Costs of Ports: Cost Factor Distribution

No	Descriptions	Percentage (%)
1	Personnel and staff time	47
2	Training, drills and exercises	13
3	Equipments	11
4	Administrative	10
5	ICT	8
6	Infrastructure	6
7	Operations/Procedures	3
8	Security level 2 & 3	2

Source: United Nations Conference on Trade and Development, Maritime Security: ISPS Code implementation, costs and related financing, Report by the UNCTAD secretariat, 14 March 2007, p. 14

Furthermore, there are the unit costs and averages that are based on a few parameters including the annual revenues of the ports, cargo throughput, the number of ISPS port facilities, and the ship calls. The unit costs analyze makes clear that there is a big difference in small and larger ports, the smaller ports have higher relative costs (Meau, 2009). The smaller port was burden with implementation ISPS Code because they need to inspect and investigate or need to do extra work to apply with the Code since they serve fewer ships and handles fewer cargos than what the larger ports do. Furthermore, cost per cargo unit or unit cost for smaller port would be higher than the larger port charges in order support cost of adopt of ISPS Code. As a result, the smaller ports will suffer more to cope with the initial cost of the code. UNCTAD (2007) has mentioned in its report:

> "*The unit cost analysis revealed the presence of important cost differentials between respondent ports, especially between larger and smaller ports. In other words, relative costs appear to be substantially higher for smaller respondent ports*." (UNCTAD, 2007)

The primarily international port related expenditures are estimated between around US$ 1.1 billion and 2.3 billion whereas the equal of these costs in sea transportation service freight payments growths about 1% firstly and 0.5% yearly of the expenses (Meau, 2009). Nevertheless on the primarily implement new security measure the majority of the governments spend around US$ 13, 500 and 50 Million per government in order to comply with ISPS Code requirements (Meau, 2009). Meanwhile in Australia, the Government announced in the 2003–04 Federal Budget

that it would allocate A$15.6 million over 2 years to tighten the country's maritime and port security by developing enabling legislation, providing guidance to industry and ensuring compliance with the ISPS Code (Hesse & Charalambous, 2004).

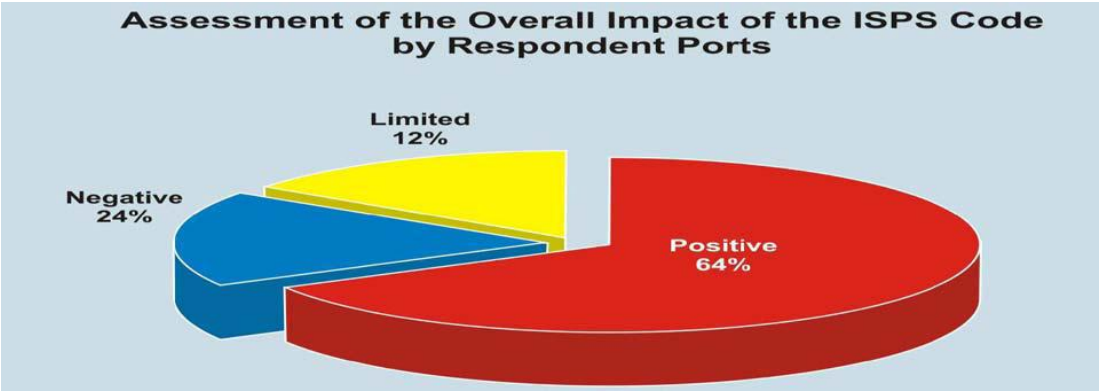
In Malaysia, major ports spent more than minor ports to comply with the Code with the average, major ports spent RM1.8 million compared to minor ports which on average spent RM1.0 million to comply with the Code (Osnin, 2005). There by, Malaysia's efforts to comply with the ISPS Code cost her ports USD21.5 million (RM81,512,487.54) and shipping companies USD2.8 million (RM10,590,815.35) (Osnin, 2005).

Despite spent for expenditure in maritime and port security, governments came up with the plan on cost-recovery with charges of the issuing and renewing of the documents, audits besides use of user fees or charges (Meau, 2009). Another alternative taken by contracting government that they would like to give aid to the national ports with measures like grants, cost-sharing arrangements, and also technical support (UNCTAD, 2007).

2.3.1 UNCTAD Study

After three years of implementation ISPS Code, published by United Nations Conference on Trade and Development (UNCTAD) on March 14th, 2007 the survey all over the world about the financing effects and level of compliance all affected parties that conducted by them through ISPS Code related expenditure made from 2003 until 2005 (Mazaheri, 2008). UNCTAD survey on impacts of ISPS Code implementation and level compliance all parties showed they received 55 completed questionnaires from the respondent of ports located in 28 countries which their majority (62%) located in developed countries, while 82% of respondent ports located in Asia and Europe (Mazaheri, 2008).

Through the survey, UNCTAD questionnaires were to examine various factors of the port such as efficiency, competitiveness, the throughput, the use of information- and communication technologies, reduced delays, theft and other criminal incidents to identifying the effects economic implications caused by the ISPS Code (Meau, 2009).



Source: *United Nations Conference on Trade and Development, Maritime Security: ISPS Code implementation, costs and related financing, Report by the UNCTAD secretariat, 14 March 2007, p. 26*

The figure above showed majority of the respondent ports results with their opinion that the ISPS code has had no specific indirect impact in their activities whereas overall impact of the ISPS code on ports. From the result it showed 64% had positive impact on ports and port activities, 24% of respondent ports have believed that the ISPS code has had negative impacts on their activities, while only 12% of the participants have told that it has had limited effect on their activities.

The majority of respondent ports that stated have positive impacts it was based on evaluation of ISPS Code provide minimum requirement of standard security aspects in port facilities under the jurisdiction of the port. Whereas negative impacts category stated that ISPS Code increased the liability on all parties particularly in cost factors, because it causes “a huge disruption to normal business” and the rest which occurred only a minor effect of the Code, because they already taken the initiatives to prevent and reduce the threats or dangerous activities in port facilities before the implementation of the ISPS Code (Meau, 2009).

CHAPTER 3

RESEARCH METHDOLOGY

3.0 Introduction

In this chapter 3, this study discusses the methodologies that are used to conduct the study on the impacts of implementation ISPS Code on port users. This chapter consists of research design; examine the chosen population and sample, research instruments that are used, collecting and analyzing the data. The summary would be discussed at the end of the chapter.

3.1 Research Design

The study was carried out qualitatively. In this study used survey research as a method in studying impacts of implementation ISPS Code on port users. The survey research can be divided into two parts which are questionnaire and interview (Trochim, 2006). The study had chosen an appropriate method to conduct the study which was interview. A common way to divide the sources of information is to divide them into two groups of data, primary and secondary (Ekwall, 2007). The primary data is that one which will be collected directly by the this study through interview, questionnaire, observation etc, whereas the secondary one will be gained by reviewing others' works via book, paper, report articles, journals and etc. (Ekwall, 2007).

However, considering the relative newness of the subject matter in Malaysia, this research relied mainly on primary data gathered through semi-structured interviews (Bell, 2006). The rationale for this method of data collection is hinged on the fact that such data have the advantage of being authentic, practical and to a very large extent reliable (Straus and Corbin, 1998). The benefits of this approach are reinforced by Creswell (2003), who buttressed the originality and dynamic attributes of research methods, and stated that qualitative research is emergent rather than tightly prefigured. Several aspects emerge during a qualitative study.

The research questions may change and be refined as the inquirer learns what to ask and to whom it should be asked. Based on the above, Dawson (2006) described qualitative research method as the exploration of attitudes, behaviors and experiences through such methods as interviews. Furthermore, the author added that such method attempts to get an in-depth opinion from participants.

3.2 Population and Sample

3.2.1 Population

The populations in this study consist of top management or executives from port users such as third party logistics that consist shipper and freight-forwarder company in Port Tanjung Pelepas (PTP). Port users mean the person or the successors and permitted assigns of such person, who is utilizing and or has utilized the services and or facilities and shall include any of their respective representatives (PTP, 2006).

3.2.2 Sample

According to Castillo (2009), he stated that convenience sampling method is appropriately used when this study aims to conduct a qualitative study. There are various types of non-probability sampling and this study will be using the convenience sampling in conducting the research topic. According to Castillo (2009), convenience sampling is chosen because it involved the respondents who are easily accessible to this study.

3.3 Research Instrument

The study was conducted using the interview method which research questions and research objectives as guidelines to formulate the questions. The semi-structured interview was used to ease this study to obtain data from respondents.

According to Chua (2006), interview is conducted verbally and the responses from respondent will be recorded in written form, cassette, video, and other electronic media (Chua, 2006). Therefore, this study used pen, note book, smart phone, recording device and question checklist in collecting data.

To ease this study in obtaining and analyzing the data, the study conducted this study by using appropriate materials. In the interview session with the respondents, this study used pen and note book to write down on what the respondents stated.

Likewise, the recording device is important which it was used to record the respondents' answer and their opinion. Therefore, this study would be able to listen back on what they were saying in which this study might not be able to write down and miss some of the important information.

In addition, a question checklist was also used in this interview to reduce the human errors which to ensure all the necessary questions were asked. Other than that, a laptop is needed in conducting this study in which it would be used by this study to collect and analyze the data.

Table 3

Summary of Research Instrument

Materials	**Function**
Laptop	Collecting and analyzing the data
Note Book	Collecting data through interview
Pen	
Smart phone Recording Device	
Question Checklist	Ensure all questions are asked in interview

3.4 Reliability and Validity

Reliability of a research can be found in three ways which are multiple viewings of videotape, multiple listening of audio tape and multiple transcriptions of audio tape by the same individual or different individuals (Ratcliff, 1995). This study listened to the recording device and read the transcription for several time in order to ensure the study would not miss important information.

According to Chua (2006), reliability of a research can be increased by using instrument such as interview form and recording devices to record and obtain information from the respondents. Therefore, this study used note book and pen to write down the important information from the respondents. The set of questions is guidance to ask further questions and it can be added based on necessity. Using hand writing to take a note and make a symbol it makes surprising effects because expression of respondents cannot be write it down during the interview session.

According to Chua (2006), this study should be open-minded and able to understand the research data as well as able to explain the data thoroughly which as this study, the emotion and own view should not affect the explanation. To increase the validity of research, this study referred and discussed with supervisor in order to formulate interview questions which are relevant and meet the research objectives. This is supported by Ratcliff (1995) and Ghazali (2005) which stated that validity of research can be increased through referring and asking individuals who have knowledge and know the this study's research topic. Likewise, the transcriptions transcribed by this study from the interview would be read and validated by the respondents.

3.5 Data Collection

In collecting the data, this study used two types of data which are the primary data and secondary data. The study obtained primary data from the interviews face to face and phone call interview that conducted by the study herself. All the questions for the interview sessions were adapted from the previous researches in which had been modified in order to comply with this study topic of interest. Besides, this study obtained the data from the open and close-ended questions that had been asked to the respondents.

In order to support and strengthen the primary information, the study carried out and obtaining information from the secondary data. It is essential in providing a better understanding of the research topic. The data was gathered by collecting information from books and thesis at *Perpustakaan Sultanah Bahiyah* Universiti Utara Malaysia. Besides that, the study also collected the information from the journals, articles and information via internet.

3.6 Data Analysis

Qualitative research does not involve numbers where it can be analyzed through using Social Packages for Social Science (SPSS). It requires this study to analyze and interpret the data thoroughly. Therefore, creativity, discipline and a systematic approach are needed to analyze the data (Powell & Renner, 2003).

Based on Powell and Renner (2003), there are five processes in analyzing the narrative data such as individual interview, journals, articles and books. The five processes proposed by Powell and Renner involve getting to know the data, focus analysis, categorize information, identify patterns and connection within and between categories; and interpretation. In getting to know the data, it required the study to read and listened to tape recording for several times in order to develop understanding about research topic. After that, the study transcribed the tape recording into word forms so that it would be easy for reviewing the text. Next, impression on what the study read and listened should be written down because it might be useful for interpretation part.

Next process is by focusing the analysis. In this study, it reviewed the purpose of the study. The study used research questions and research objectives as the guideline in analyzing the data. There are two common approaches proposed by Powell and Renner which are focus by question or topic; time period or event and focus by case, individual or group. The study used the first approach which is focus by question or topic; time period or event as this study would see how the respondents respond to the interview questions or this research topic. Therefore, this study used open-ended

questions to carry on the interview which required respondents to give complex answer (explanation for every question). After that, the data was organized by questions to identify the similarities and differences in respondents' answer.

The third process in analyzing the qualitative research is categorizing the information. This part is a root of qualitative analysis (Powell & Renner, 2003). This study read and re-read the text as well as identifying the categories by using abbreviated codes. There two ways in categorizing the information which are preset categories and emergent categories. This study used the emergent categories which data categorization was identified after reading the data thoroughly.

In identifying patterns and connection within and between categories, which the forth process, this study was able to see the patterns and connection after grouping the organize data. First of all, this study created larger category where it combined several categories so that it is easy for this study to see how they relate. Next, the this study counted how many times a particular category or theme comes up in order to identify which appear the most. Lastly in this process, a summary for each category was written down after assembling all the data to particular theme.

The last process that proposed by Powell and Renner is interpretation. They defined interpretation as a human system that attaches meaning and significance to analysis. In this part, this study used all the categories and connections to explain the research findings. There several sub-processes that this study will follow to interpret data.

First, this study will develop a list of key points or primary findings and follow by synthesizing them. An outline of findings was developed in the next chapter where citing quotes would be helpful to this study to give explanation. In addition, this study used visual aids which were developed from the findings. This is to ease and enhance individuals' understanding.

It also involve a little bit thematic analysis, were Braun and Clarke (2006) defines thematic analysis as identifying, analysing and reporting patterns (themes) within data and it minimally organises and describes your data set in (rich) detail. However, frequently it goes further than this, and interprets various aspects of the research topic.

3.7 Ethics in Research

In conducting this study, there were several basic principles of ethical research that this study followed.

First, this study should inform consent in which the respondents are agreed to participate in this study (Trochiim, 2006). This to ensure that this study gets the permission to interview the respondents in the organization involves. Thus, tthis study will contact the organizations to ask for permission and then, sent the head of letter from the Ghazalie Shafie Graduate School of Government (GSGSC) to them. On the day of interview, respondents are required to fill in the consent form to proof that this study got permission to interview them.

Next principle of ethical research is coercion (Trochiim, 2006). The respondents should not be forced to participate and answering the offended questions because they have their rights for not to answer it. Therefore, this study should precede the interview by asking the next question.

After that is confidentiality (Trochiim, 2006). This principle is essential in every research because the respondents have their rights that the data they provided was confidential. This study should minimize the number of individuals who will see or collect the data. Thus, it was limited to supervisor and this study only. This study also informed the respondents regarding on this issue through the consent form that they had filled in. Additionally, their name would appear and only quoted as respondent.

This study should briefly describe to the respondents about the study that she will conduct (Callahan & Hobbs, 2010). This is to ensure that the respondents' understand on the study that will be conducted by this study. A briefly description about the study would guide and gave awareness for respondents in answering the interview questions.

3.8 Summary

Chapter 3 discussed on aspects which are associated to the methodologies that are used in research started from data collection until analyzing the data. In this chapter, it also discussed on research design, the respondents who involved in this study and instrument that were used in conducting this study. This study used interview method to carry out the study. Furthermore, conducting a research required this study to follow the ethical principles which also has been discussed in chapter 3.

CHAPTER 4

FINDINGS AND DISCUSSION

4.0 Introduction

This chapter discusses the findings of this research after this study has done transcribing and analyzing the respondents' answer. The discussion of findings will be divided into three parts that are based on the research objectives from chapter 1. In addition, the respondents' background and details of interview will be shown also in this chapter. The last part of this chapter is the summary of chapter 4.

4.1 Background of Respondent

The background of respondents were collected qualitatively which respondents information has been fill in the questions sheet that consist name of the company and position of the interviewee, respondents previous experience in his/her field, and length of position hold by respondents. In this paper, their background has summarized in a form of table.

Table 4

Background of Respondents

Background	1	2	3
Position	Manager Forwarding	Senior Executive Operation	Shipping Executive
Name of the Company	Greenpen Freight Services	KT Logistics	Innovalues
Length of position	15 years	5 years	3 years
Previous experience	34 years	10 years	4 years

Table 5

Details of Interview

Respondent	Date	Time	Length
1	16 May 2014	6.00 p.m-6.30 p.m	½ hour
2	19 May 2014	3.30 p.m-3.50 p.m	20 minutes
3	22 May 2014	4.00 p.m-4.15 p.m	15 minutes

4.2 To understand current condition of ISPS Code implementation at PTP

Almost ten years implementation ISPS Code in Port of Tanjung Pelepas, this study wants to know the recent situation of ISPS Code implementation at PTP through port users' perspective. In this study all respondents will asked about what current condition ISPS Code at PTP. Based on respondents, port security aspect such as in Port Tanjung Pelepas after the accomplishment on new security measure became better than previous ones even though port users don't involve directly in ISPS Code at PTP. It showed by the statement made from respondent 1 and 2 during interview session.

Respondent 1:

> " *...kalau security port punya bab kalau dorang suruh pakai baju safety, helmet topi semua kena ikot..memang ade perubahan dalam port security especially syarat nak masuk port pon sekarang dah more straight la kalau dulu tak sangat… kami just follow on port regulations..*"

Respondent 2:

> "*Port Tanjung Pelepas memang port international memang masuk mothers punya vessel so dorang pakai satu code.. so satu code tu yang akan control semua… coz kalau ikut sekarang port security lagi ketat compared yang dulu punya… macam facilities yang dorang pakai sekarang memang up to date..*

bagi pihak transportation macam our company kemudahan yang port provide memang bagus… just memang la kawalan keselamatan agak ketat compared dulu.".

From the findings, it showed new security measure implemented by international port especially at Port of Tanjung Pelepas has improvement in port security aspects. Furthermore, ISPS Code emphasizes on port facilities security part in their requirement. Respondents said they need to follow all regulation set up by the port especially in term of port security or other procedures when port users in port area. From port users' perspective, many changes such as requirement to wear safety jacket within port perimeter, permission pass to visitors need to showed and etc had happen after the implemented ISPS Code at PTP with introduced new roles and responsibility within maritime players. It is more secure in each aspect of port perimeters from in front of the gate until each corner of port area. As port users or customers, they need to obey any regulations made by port in order the process of import and export move smoothly.

Besides that as port users, they bound with Port Standard and Procedure and all regulation inside the port perimeters (EPSL, 2013). Although port users such as freight forwarder and third party logistics bound with Port Standard and Procedures but it doesn't involve directly with them in term of ISPS Code. It stated by respondent answer.

Respondent 1:

"kita memang kena ikot rule dia orang.. apa yang dorang (port) nak kita kena ikot sebagai forwarding but kami takde involve sangat dengan port security code yang baru because as forwarding agency only act as agent to release the goods from Customs…shipper appointed us on behalf them"

Respondent 2:

"*setahu saya ISPS Code ni memang tak involve sangat dengan kita orang…kita orang dalam bahagian transportation kurang masuk dengan ISPS ni coz kita orang more involve dengan Land and Transportation Acts… tapi bagi kita orang punya bahagian kurang libat sangat mengenai Code ni… kalau budak-budak operation or liner dorang lagi aware pasal Code ni…"*

The Code only applied directly into port operators and vessels that compulsory to enhance their security on ships and port facilities under International Convention for the Safety of Life at Sea (SOLAS), 1974 (Hesse & Charalambous, 2004). Based on requirement in SOLAS regarding on ISPS Code regulations, port users' responsibilities toward of port security were less than port operators and shipping company or liner. Port operator responsibilities to ensure their port abide ISPS Code requirements especially in providing and secure the threats internal or external. These are supported by Benamara and Asariotis (2007) that ISPS Code applies to port

facilities serving ships engaged on international voyages. Additionally, Chang et al (2010) wrote that ISPS Code is a prime example of the international maritime community effort to expand the concept of maritime security in making vessels less attractive as suitable targets (Heard 2012).

Nevertheless, as player in maritime industry or main user in port, port users need to aware more about Port Standard and Procedures particularly in term of port security because all the process or activities in port causes threat to their goods or import export activities will disturbed. Although they don't involve directly with ISPS Code, they need to take own initiatives about security or safety environment in maritime industry.

This year, IMO will celebrate ten years of implementation ISPS Code after the enforcement on 1 July 2004. Even though Port Tanjung Pelepas implemented this Code on 2004, not all port users aware with the current condition of ISPS Code. It already stated in Port Tanjung Pelepas Terms and Conditions of Business (2006) that all port users are required to be fully aware of all necessary ISPS Code requirements prior to entering the Port Area also adhere to the three levels of ISPS Code under the understanding and requirements of ISPS Code.

4.3 To identify the impacts of ISPS Code implementation on port users

The implementation of ISPS Code as new security measures in port security to enhance security part in maritime industry was given various impacts to involving parties. Port itself as main component in maritime industry had affected with new security measures. Others than port, port users as part of port also affected with implementation ISPS Code. Cost increased was one of the impacts in implementation ISPS Code which effected on government, port and port users on providing the better port security. In this study, the impacts of new security measure toward port users being identified. Below this show respondent answer:

Respondent 2:

> " *Bila port kenakan apa-apa regulation as users So kesan tu memang ada even tak banyak.. Macam awak tanya tadi kos naik tak, so kos naik la kalau ada apa-apa rule changing dalam port…*

Respondent 3:

> "*Forwarding company yang kami lantik yang buat semua jadi shipper tak amik tahu peraturan apa yang ditetapkan oleh port. Kesan tu mungkin tak secara langsung pada kami…. Macam kos mungkin kami kena bayar agent lebih la compare yang lama..*"

From the findings, the respondents stated the impacts were direct on them with new security measure implemented in Port of Tanjung Pelepas however it not affected their operation or port users' activities. Based on respondents' answer that they need to follow all regulation made by port even though it costly and they know that new security measure create safer environment in port. UNCTAD study (2007) showed implementing ISPS Code entails costs and improvements in security measures have no doubt created a safer environment in ports, but the costs of compliance with such initiatives have also been a bane to terminal operators and other parties (Khalid, 2005). This supported by Okoroji and Ukpere (2011), the adoption of new security measures has imposed large direct and indirect charge on travel activities and freight services.

All parties' compliance with the Code must follow the regulation and it can't protest which ISPS Code was most important global security initiatives with the impacts affecting international shipping industry. According to Bichou (2004), through new security measures it will test the ability, reliability, liability of active participants in maritime industry from shippers, carriers, ports, freights forwarder and government to ensure them for fulfill security requirements while port activities moving.

Even though port users such as forwarding agency, logistic companies and shipper not involved directly in implementation ISPS Code, they still affected with new security measures. Port users bound with Port Standard and Procedure and compulsory for them to adapt and observe the changes in port procedure. The changes make by port operator in their procedure it gives port users strain in their work in order to comply with the regulations of port. It showed by Maritime and Port

Authority of Singapore (MPA) 2003, announced that they will be warning any party who involve in ISPS code especially vessels that did not comply with the code starting on July 1, 2004 with new security measures requirements will be subject to control and compliance measures such as delaying the ship, detention of the ship, and expulsion of the ship from port.

As mention above by respondents and in literature review, cost as main factors on compliance into ISPS Code. As player in maritime industry, port respondents compulsory to match their operation process in order to comply with Port Standard and Procedure. They don't have the right to protest any decision made by port operators.

Based on answers that gave by respondents, it showed shipper have indirect impacts of ISPS Code because of all import and export activities done by third party known as an agent. This happens because shipper used full service by every document, item and activities done by forwarding agent whereas forwarding and third party logistics have direct effects of implementation ISPS Code on their activities however it does not affected organization or company at all. It showed ISPS Code implementation directly to ports and vessels support by respondent statement.

Respondent 1:

"*Forwarding tak involve dalam Code ini punya regulations, kami hanya terikat dengan Akta Kastam.. Kami takde handle kapal so tak terikat dengan port*

and maritime punya Code… Only shipping operation and carrier follow port and maritime code.. kami just obey on port regulations jek"

4.4 To investigate the contribution of ISPS Code toward port effectiveness at PTP

Well structured port planning during port activities contribute to port effectiveness. However in this study, it showed that the implementation of new security code does not directly relate to port user activities in contributing to port operation effectiveness. Thus, the implementation of ISPS code by port users activities such as forwarding agent, shipper or logistic companies has indirect impact to port effectiveness based on respondents' statement.

Respondent 1:

"*Forwarding in charge dalam melepaskan barang dari Kastam, everything about port effectiveness relate dengan port security there has not relate with us… maybe the effectiveness in port activities more smoothly and secure with the new code...* "

Respondent 2:

"*Saya tak pasti dengan implementation ISPS ni memang ada keberkesanan for port activities la maybe ade la skit...*

Respondent 3:

"*Disebabkan forwarding agent yang uruskan everything so kami tak rasa port effectiveness tu ade kena mengena dengan shipper kalau sentuh part port security..*"

Based on the findings, mostly respondents answered that port effectiveness not related with their roles or activities. There activities done by port users with the services provided by port operator not assist port effectiveness because they don't think their performance effect on port. But they agree that new Code in port security enhance port performance in security aspect and contribute port effectiveness through development on new equipment and enhancing in security requirements. It stated by Okoroji and Ukpere (2011), ISPS Code contributed immensely to port security and efficient port operation.

In this study also found others scholars discussed the effectiveness of ISPS Code itself compared with port effectiveness. Therefore, according Raymond and Morrien in Lloyd's MIU Handbook of Maritime Security (2009) implementation of ISPS not been very effective in prevent threat on maritime security. They have different perspective into ISPS Code implement with discussed more on the effectiveness of the Code. Furthermore, in their study they query ISPS Code framework requirement not have specific guidelines or minimum standard because all depends on own government regulations.

4.5 Summary of Chapter

In chapter 4, it discussed the findings obtained through interview sessions that have been conducted. In the findings, this study found that most of respondents not directly impacts with implementation of International Ships and Port Facilities Security (ISPS) Code. Based on the findings, port users necessarily to abide Port Standard and Procedure inside port perimeters even though it increases their operation cost. Additionally, the conclusion and recommendations for future researches will be discussed in chapter 5.

CHAPTER 5

CONCLUSION & RECOMMENDATION

5.0 Introduction

This chapter is the review for the research that has been done from the first chapter until fourth chapter and it is divided into several parts which the first part is introduction. Next is the summary of research. The recommendations for future researches will be discussed in the part and at the end of this chapter, summarization of this chapter will be discussed.

Objective 1: To understand current condition of ISPS Code implementation at PTP.

Based on first objective discussion, it showed that port users such as freight forwarder under third party logistics (3PLs) did not involve directly in the current condition of implementation ISPS Code at PTP. The answers provided by respondents not give clearly current condition of ISPS Code at PTP that this study wants to know. Any major changes happened in Port Tanjung Pelepas especially relate with port users interest cannot be detect specifically especially in port security part.

Furthermore, PTP have been implemented ISPS Code for 10 years within that time there have many enhancement on port facilities to comply with new security measures. New security equipment, standard and procedures may change step by step from the date of port implemented. Meanwhile each country have own standard

requirement different from other country even though it amendment under SOLAS and IMO.

Objective 2: To identify the impacts of ISPS Code implementation on port users.

According to respondents' information, the impacts of implementation ISPS Code mostly on cost of implementing Code and changes in regulations on port users. Increasing cost cannot be avoided by port users in order to abide new security measures. Others impacts, their working process will change based on new security measures requirements. For port operators all procedures especially port security will be structure back based on ISPS Code. This study cannot presume the all the shipper have indirect impacts on ISPS implementation because several of shippers have own forwarding agents. Even though ISPS Code implementation costly, it does not affected port users operation, organization and activities.

Objective 3: To investigate the contribution of ISPS Code toward port effectiveness at PTP

Thus, enhancing port performance and upgrading security equipment at port facilities contributing port operations more effectiveness. Even though the respondents' activities not contributed to the port effectiveness but from their point of view about ISPS Code implementation at PTP brings positive impacts in port operations also to

port users. Port environment getting safer and organize compared with before implementation of ISPS Code.

As conclusion, ISPS Code brings positive impacts for all parties involve direct or indirect although cost as main constraint could overcome with government grants or port operator fees and charges. It showed by UNCTAD Report on 2007 on assessment overall impacts on port respondents. However, port users in PTP does not alert at all with the ISPS Code even though they are important customers for port operator and should be more aware on every aspects of Code apply by port in order to avoid misunderstanding on working process. As main operators, Port Tanjung Pelepas should active in spread all information regarding port operation or involving port security process.

5.1 Recommendation

This study has several recommendations for the future this studys. It is hoped that this study can give them ideas and as a guideline in conducting researches regarding on this topic.

For the first recommendation is the study can be done by using mix methods which are quantitative and qualitative methods in order to obtain information and get better understanding on this issue. According to Matveev (2002), quantitative method can state "clear and precise specifying both independent and dependent variables under investigation and eliminates or minimizes subjectivity of judgement" where as qualitative method "obtains more realistic feel of the world which can not be experienced in numerical data and able to use flexible ways to perform data collection, analysis and interpret information." Therefore, combining these two methods enable this study to obtain holistic view and better understanding on this topic.

This study suggests that future studies can proceed with ongoing studies of ISPS Code in port taking into account the different perspectives of the diversity of the parties involved in port.

In order to obtain another point of view or perspective, the future this study is recommended to conduct the study on shippers who owns their forwarding agency. In this study, shipper that has been selected appointed forwarding agency that provide full service as agent. Different understandings and process or operation might be collected for future research.

Due to time constraint only three respondents selected from each category. Next this study might be to added more participants or sample. Furthermore, future this study is recommended to interview more than five respondents in order to obtain more information and better understanding. It also limited in years of primary and secondary data which this study collected all information from year 2002 until 2012.

5.2 Summary

This chapter reviews the whole research from chapter 1 until chapter 4. The this study can conclude that impacts of ISPS Code on Port users were direct effects. Hence, it is hoped that the findings from this research can provide organization some knowledge and information regarding on ISPS Code. In addition, discussion and recommendations from this research can be some guidelines for the future this studys as well as give them some ideas.

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APPENDIX 1

APPENDIX 2

QUESTIONS

1. Name of the company:

2. Position of the interviewee:

3. Date of interview:

4. Length of interview:

5. Before implementation the International Ship and Port Facilities Security Code by port, each company had to implement some security measures. What are the measurement that you have being adapted and implemented?

6. Did you have any problem to fulfill all the requirements of new security measures implemented by Port Tanjung Pelepas, you dealing it?

7. Has the implemented ISPS code by Port Tanjung Pelepas effected to your company? And what are the factors (Human resource or others)?

8. How much did it cost for you (Approximately) when changing old requirement of security measures to ISPS Code requirement of security measures?

7. Do you believe that the implementation of the ISPS code brings negative or positive impact on your company efficiency in general?

8. Are you satisfied by Port Tanjung Pelepas implemented the ISPS code with your company situation?

9. Is that any problems that you think beyond of your firm abilities to implement because of ISPS Code?

10. Is that under new ISPS Code regulations better than old regulations before this (in term of quality)?

11. Is the implementation of ISPS Code contributing to effectiveness in port facilitiy security and what are the factors?