

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

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

**By**

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Master of Science (International Business)**

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## **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)

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## LIST OF ABBREVIATIONS

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.

The contents of  
the thesis is for  
internal user  
only

## REFERENCES

- Ascutia,R.,(2013). Korea, Malaysia ports achieve traffic growth in 2012. Retrieved February 26, 2014 from PortCalls Asia: <http://www.portcalls.com/korea-malaysia-ports-achieve-traffic-growth-in-2012/#>
- Bateman, S. (2009). Maritime security implications of the international shipping recession, *Australian Journal of Maritime and Ocean Affairs*, 1(4), 112–121.
- Beckman, R. (2002). Singapore Strive to Enhance Safety, Security, and Environmental Protection in its Port and in the Straits of Malacca and Singapore, *Ocean and Coastal Law Journal*. 22 (2008), 167-200
- Benamara, H.,& Asariotis, R.,(2007).ISPS Code Implementation Ports: Costs and Related Financing, UNCTAD
- Bichou, K. (2004). The ISPS Code and The Cost of Port Compliance: An Initial Logistics and Supply Chain Framework for Port Security Assessment and Management. *Maritime Economics & Logistics*, 6(4), 322–348.
- Bichou, K.,Bell, M., & Evans, A.,(2007).*Risk Management in Port Operations, Logistics and Supply-Chain Security*. Informa. London
- Braun, V. and Clarke, V.(2006).Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3 (2). 77-101
- Burns, R. H.,Bateman, S.,Lehr, P.,(2009). *Lloyd's MIU Handbook of Maritime Security*. Auerbach Publications. Florida
- Callahan, T. C., & Ron, H. (2010, October 21). Research Ethics. Retrieved April 6 2014, from University of Washington: <http://depts.washington.edu/bioethx/topics/resrch.html>

- Castillo, J. J. (2009). Non-Probability Sampling. Retrieved April 5, 2014, from Experiment Resources: <http://www.experiment-resources.com/non-probability-sampling.html>
- Christopher, K.,(2009).*Port Security Management*. Auerbach Publications. Florida
- Chua Y.P. (2006). *Kaedah dan Statistik Penyelidikan*. Kuala Lumpur: McGraw-Hill
- Commander, L., & Mcnaught, F. (2005). Effectiveness of the International Ship and Port Facility Security ( ISPS ) Code in addressing the maritime security threat. *Gedders paper, 1*(September 2001), 89–100.
- Container Management.(2013). Magazine Top 20 of world leading container ports Retrieved November 23, 2013 from PTP: <http://www.ptp.com.my/media-news.aspx?mid=1&mnid=7&cid=0&itmid=2777&title=World%20Top%20Container%20Ports>
- Creswell, J. W. (2003). *Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- David, P, & Stewart, R.(2010). *International Logistics: The Management of International Trade Operations*. Cengage Learning. Ohio
- Department Statistics Report, (2012) Malaysia Statistics Department
- Ekwell, D.,(2007).Antagistic Gateways in the Transport Network in a Supply Chain Perspective. Department of Technology Management and Economics-Division of Logistics and Transportation. Göteborg, Chalmers. University of Boras.
- Engineers, C., Oceans, L., & Near, O. R. (2012). 10 Years After 9 / 11 , Security Still a Top Priority of U.S Ports, 11–13

- Ghazali Darusalm. (2005). Kesahan dan Kebolehpercayaan dalam Kajian Kualitatif dan Kuantitatif. Retrieved April 4,2014 from IPGM Kampus Pendidikan Islam: <http://www.ipislam.edu.my/uploaded/file/ghazali.pdf>
- Gunasekaran, P. (2012). Malaysian port security: issues and challenges. *Australian Journal of Maritime & Ocean Affairs*, 4(2), 56–68.
- Heard, F. C.,(2012). Examining the International Ship and Port Facility Security Code: A Correlative Analysis of Maritime Security.School of Business and Management, Northcentral University
- Hesse, H., & Charalambous, N. L. (2004). New Security Measures for the International Shipping Community. *Journal of Maritime Affairs*, 3(2), 123–138.
- Horton, D. (2013). Port Standards and Procedures, Esperance Ports Sea & Land, 1–33
- Lee, P. T. (2007). Impact of Port Security on the Users and Provides of Container Maritime Transportation Service.ppt.
- .Khalid, N. (2007). *Enhancing Maritime Support Services in Malaysia: A Strategic Approach*, Maritime Institute of Malaysia (MIMA) , 1–36.
- Khalid, N.(2005). Maritime Security Initiatives Post 9-11, Costs and Implications to the Port Sector, Maritime Institute of Malaysia (MIMA)
- Mardiana Nordin,(2008).Undang-undang Laut Melaka: A Note on Malay Maritime Lawin the 15<sup>th</sup> Century.Memory &Knowledge of the Sea in South EastAsia. University Malaya.
- MarineLink.com.(2004).July 1:One more day. Maritime Reporter and MarineNews magazine online

- Maritime and Port Authority of Singapore (MPA) Website.(2003).
- Meau, I.(2009).The ISPS Code and the Influence on Shipping.University Gent
- Okoroji, L. I., & Ukpere, W. I. (2011). The effectiveness of the International Ship and Port Facility Security Code ( ISPS ) in Nigeria, *African Journal of Business Management*. 5(4), 1426–1430
- Osnin, N. A. (2005). Financial Implication of the ISPS Code in Malaysia,Maritime Studies.
- Port Tanjung Pelepas.(2006). Terms and Conditions of Business.2<sup>nd</sup> Edition.
- Powell, E. T., & Renner, M. (2003). Analyzing Qualitative Data. Retrieved February 23, 2014, from University of Wisconsin-Extension website: <http://learningstore.uwex.edu/assets/pdfs/g3658-12.pdf>
- Ratcliff, D. (1995). Validity and Reliability in Qualitative Research. Retrieved March 5, 2014, from The Qualitative Research: <http://qualitativeveresearch.ratcliffs.net/Validity.pdf>
- Renkema, A., & Kinlan, D. (2000). Tanjung Pelepas Port: From Jungle to Malaysia ' s Newest Container Port, 3–11.
- Saedi, S. N., Khodabakhshi, S., & Jafari, H. (2012). An Empirical Study on Effects of ISPS Code Implementation on Iran ' s Ports Activities , Case study of Abadan, , *Advanced Research in Economic and Management Sciences*. 446–455.
- The Star (July2, 2012). PTP investing RM 1.4 bil to make port more competitive. Retrieved November 23, 2013 from PTP: <http://www.ptp.com.my/media-news.aspx?mid=1&mnid=7&cid=0&itmid=2714&title=PTP%20%20investing%20RM%201.4bil%20to%20make%20port%20more%20competitive>

Trelawny, C. (2005). Maritime Security: Implementation of the ISPS Code by Senior Technical Officer , Maritime Security Section Maritime Safety Division International Maritime Organization IMO Maritime Security Measures.

Trochim, W. M. (2006, October 20). Survey Research. Retrieved March 5, 2014, from Research Methods Knowledge Base:  
<http://www.socialresearchmethods.net/kb/survey.php>

U.S Department of Transportation.(2008).Glossary of Shipping Term.Maritime Administration, Washington DC

UNCTAD (2007) ISPS Code implementation, costs and related financing. United Nations Conference on Trade And Development.

UNCTAD (2012) Review of Maritime Transport. United Nations Conference on Trade And Development

## **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 facility security and what are the factors?