PORT SECURITY IN A DEVELOPING COUNTRY – PRE AND POST 9/11 TERRORIST ATTACKS: A CASE STUDY ON PORT KLANG IN MALAYSIA

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DECLARATION

"I certify that this work has not been accepted in substance for any degree, and is not concurrently being submitted for any degree other than that of Doctor of Philosophy (Ph.D) being studied at the University of Greenwich. I also declare that this work is the result of my own investigations except where otherwise identified by references and that I have not plagiarised the work of others".

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ABSTRACT

The terrorist attacks on 11 September 2001 on the World Trade Centre and Pentagon in the United States widely known as 9/11 undeniably produced a profound impact on a multitude sectors across the globe. The events became a *turning point* in the treatment of maritime security establishing a "before" and after" dividing line. One element that emerged in response to that attack was the change of attitude to security. This change, led to changes in behaviour and practices since it prompted a raft of measures, rules, and regulations to prevent such occurrences in the future. This thesis examines how security in the maritime sphere in respect of ports was given a new impetus by virtue of their inherent weaknesses as a potential target. In the past, port security was primarily focused on cargo theft and pilferage as well as denying access to those seeking to enter the country to improve their political or economic condition or to engage in smuggling activities. While the international regulation of shipping had increased substantially through the efforts of the International Maritime Organisation (IMO) in the second half of the 20th century, ports had remained largely unaffected by this regulation. However, the 9/11 changed this situation.

As the main focus turned towards dual objectives: to secure ports from any kinds of unlawful acts and concurrently fulfil the international security requirements, implementing and complying with a host of security regimes imposed by a range of parties was seen by some commentators as a particular challenge for the developing nations, due to higher costs and the implications for port policy and administration.

This study examines this generalisation using the Port Klang and Malaysian port system as a case study. It analyses security measures and management before and after 9/11, considering the impact not only of international regulations, especially the International Ship and Port Facility Security (ISPS) Code, but also of bi-lateral security measures required by the United States as a trading partner and regional organisations. Its findings are based on in-depth interviews conducted with the key Malaysian governmental and private stakeholders, supplemented by other primary and secondary sources. The study concludes that, partly as a result of previous colonial and post-colonial anti-terrorist measures, Malaysia generally had a well managed port security system prior to 9/11. This meant that though some minor internal and external problems were identified, Malaysia managed to handle effectively the post 9/11 port security regimes with minimal cost implications. Any presumption that, as a developing country, it would have problems with implementation proved to be unfounded.

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ABBREVIATIONS

ABS	American Bureau Shipping
ACCC	Associated Chinese Chambers of Commerce
ACP	Assistant Commissioner of Police
AELB	Atomic Energy Licensing Board
AEO	Authorized Economic Operator
AIS	Automatic Identification System
AMMTC	ASEAN Ministerial Meeting on Transnational Crime
APA	ASEAN Ports Association
APEC	Asia Pacific Economic Cooperation
ARF	ASEAN Regional Forum
ASEAN	Association of Southeast Asian Nations
ASG	Abu Sayyaf Group
ASP	Assistant Superintendent of Police
BIMP-EAGA	Brunei, Indonesia, Malaysia, Philippines East ASEAN Growth Area
BV	Bereau Veritas
CBP	United States Customs and Border Protection
CGSO	Chief Government Security Office
CSI	Container Security Initiative
CTAP	Counter Terrorism Action Plan
C-TPAT	Customs- Trade Partnership Against Terrorism
DA	Designated Authority
DHS	Department of Homeland Security
DNV	Det Norske Veritas

DOA	Duly Authorised Officers
DOE	Department of Energy
DSLB	Domestic Shipping and Licensing Board
DSP	Deputy Superintendent of Police
DWT	Deadweight tonnage
EDI	Electronic Data Interchange
EMC	Extra Movement Charges
EOKA	Ethniki Organosis Kyprion Agoniston
EPU	Economic Planning Unit
ESCAP	Economic and Social Commission for Asia and Pacific
EU	European Union
FAL	Convention on Facilitation of International Maritime Traffic
FAST	Free and Secure Trade Program
FMS	Federated Malaya States
FOC	Flags of Convenience
FPDA	Five Powers Defence Arrangement
FPSO	Floating Production Storage Offloading
FSO	Floating Storage Offloading
GAO	US General Accounting Office
GDP	Gross Domestic Product
GL	Germanischer Llyods
HPH	Hutchinson Port Holdings
ICC- IMB	International Chamber of Commerce - International Maritime Bureau
ILO	International Labour Organization
IMO	International Maritime Organization

IPS	International Port Security Program
ISA	Internal Security Measure Act 1960
ISM Code	International Management Code for the Safe Operation of Ships and for Pollution Prevention
ISO	International Organization for Standardization
ISPS Code	International Ship and Port Facility Security Code
ISSC	International Ship Security Certificate
ITF	Transport Workers' Federation
JI	Jemaah Islamiah
KCT	Kelang Container Terminal
KLIA	Kuala Lumpur International Airport
KMM	Kumpulan Mujahidin Malaysia
KMT	Kelang Multi-Terminal Sdn Bhd
KPA	Kelang Port Authority
KPM	Kelang Port Management Sdn Bhd
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
LR	Llyods Register
LTTE	Liberation Tigers of Tamil Eelam
MARPOL	International Convention for the Prevention of Pollution from Ships
MECC	Malaysian Maritime Enforcement Coordinating Centre
MFSO	Maritime Facility Security Officer
MFSP	Marine Facility Security Plan
MILF	Moro Islamic Liberation Front
MIMA	Maritime Institute of Malaysia
MISC	Malaysian International Shipping Corporation

MITI	Ministry of International Trade and Industry Malaysia
MMEA	Malaysian Maritime Enforcement Agency
MOT	Ministry of Transport
MoU	Memorandum of Understanding
MPC	Malaysian Port Commission
MSC	Maritime Safety Committee
MTSA	Maritime Transportation Security Act 2002
MTSASP	Maritime Transport Security Area Security Plan
MTSO	Maritime Transport Security Officer
MTWG	Maritime Transport Working Group
NAFTA	North American Free Trade Agreement
NCB	Northport Corporation Berhad
NCV	Non Convention Vessel
NDP	New Development Policy
NKK	Nippon Kaiji Kyokai
NNSA	National Nuclear Security Administration
NPP	National Ports Plan
NSC	National Security Council
NTS	Non-traditional security
NVOCC	Non-Vessel Operating Common Carriers
OCR	Optical Character Recognition
OECD	Organisation for Economic Co-operation and Development
OPP1	First Outline Perspective Plan
OPP2	Second Outline Perspective Plan
PAN	Pre-Arrival Notification

PASO	Port Area Security Officer
PETRONAS	Petroleum National Berhad
PFSO	Port Facility Security Officer FSO
PIS	Participant Information Sheet
PKA	Port Klang Authority
PKFZ	Port Klang Free Zone
PKMTSASC	Port Klang Maritime Transport Security Area Security Committee
PSC	Port State Control
PSI	Proliferation Security Initiative
PTP	Port of Tanjung Pelepas
RM	Ringgit Malaysia
RMC	Royal Malaysian Customs
RMP	Royal Malaysian Police
RMSI	Regional Maritime Security Initiative
RPM	Radiation Portal Monitors
RSO	Recognised Security Organisation
SBD	Smart Border Declaration
SAFE Port	Security and Accountability For Every (SAFE) Port Act
SCM	Ship Classification of Malaysia
SEA	Southeast Asia
SLD	Office of Second Line of Defense
SLOC	Sea Lines of Communications
SOC	Statement of Compliance
SOLAS	International Convention for the Safety of Life at Sea
SOM	Straits of Malacca

SOP	Standard Operating Procedure
STA	Strategic Trade Act 2010
SUA	Suppression of Unlawful Acts Against the Safety of Maritime Navigation
TAC	Treaty of Amity and Cooperation
TAPA	Transported Asset Protection Association
TEN-T	Trans-European Transport Networks
TEU	Twenty foot equivalent unit
TNC	Transnational corporation
TSA	Transportation Security Administration
TTEG	Tripartite Technical Experts Group
TWIC	Transportation Workers Identification Credential
UK	United Kingdom
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNCTAD	United Nations Conference on Trade and Development
UREC	University Research Ethics Committee
US	United States of America
USCG	United States Coast Guard
USD	United States Dollar
VHF	Very High Frequency
WCO	World Custom Organization
WMD	Weapons of mass destruction
ZOPFAN	Zone of Peace, Freedom and Neutrality

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This thesis explores from a policy perspective the impact on, and challenges to, port security brought about by the terrorist attacks on 11th September 2001 on the World Trade Centre and Pentagon in the United States (US), in the case of a developing country, Malaysia. The events, widely known as 9/11, undeniably produced a profound impact on a multitude of sectors across the globe. One notable element that emerged in response to those attacks was the change of attitude to security. This change led to changes in behaviour and practices since it prompted a raft of measures, rules, and regulations to prevent such occurrences in the future, and in the maritime sphere culminated in the quick introduction of the International Ship and Port Facility Security Code (ISPS) at the international level by the International Maritime Organization (IMO), the specialised maritime agency under the United Nations (UN). Security in respect of ports was given a new impetus by virtue of their inherent weaknesses since they tended to be seen as potential targets.

Traditionally, port security has always been a matter of local concern for governments, port managers, owners and other stakeholders. In the past, port security was focused primarily on preventing cargo theft, pilferages, smuggling and access by those seeking to enter the country to improve their political or economic condition. After 9/11 however, the issue of security turned out to be a hot topic and a prime agenda of debate that drew an enormous amount of attention from policy makers, security analysts, scholars, educationalists and maritime stakeholders. The effect of 9/11 was to alter the treatment of maritime security generally and of ports in particular. Hence the international community regarded that incident as a *turning point* (Tschirgi, 2007) that "changed everything" and established a dividing line "before" and "after" 9/11 in the global maritime sector. Going a step further, Christopher (2009: 3) claims 9/11 as a paradigm-shifting event for the whole transportation system's security in general. The whole event, in fact, made the US recognise "a new kind of war" that urged it to rigorous action (Dudziak, 2003: 2-3). Reflecting a decade later on the 10th anniversary of 9/11, a Malaysian journal

commented: “ten years after Sept. 11 attacks of 2001, the United States has altered the balance between freedom and security, turning an open casual society into an ever-vigilant one” (The Star Online, 7 September 2011). This was one of the distinct impacts of 9/11.

The international regulation of shipping had been increased substantially through the efforts of the IMO in the second half of the 20th century in response to certain events especially some high profile maritime accidents or disasters. Usually, the effect of any particular major event was pressure for change through the provision of new rules and regimes. The event then categorically was set as a reference point for similar measures. For instance, the sinking of *Titanic* in 1912 drew attention to the safety aspect of ships and brought in the International Convention for the Safety of Life at Sea (SOLAS 74) (Li and Wonham, 2001); the massive pollution as result of the oil spill by *Torrey Canyon* in 1967 resulted in major changes to international regulation in the International Convention for the Prevention of Pollution from Ships (MARPOL 73). Similarly, another major oil spill, this time by *Exxon Valdez* in 1989, amplified concern about the potential effect on the environment and hence the double hull requirement was imposed, phasing out single hull tankers. While, all these incidents reflected safety and environmental aspects, the *Achille Lauro* incident in 1985 drew attention to the threat of maritime terrorism affecting the shipping sector and led to the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA Convention) in 1988 (O’Neil, 2003).

Ports had remained largely unaffected by these developments in international regulation. However, 9/11 led to the introduction of new port security regimes. As already noted previously, as far as security was concerned, ports were largely treated in a local, national context in comparison to shipping and rarely as the context for a terrorist attack or as potentially high risk for an unwanted incident. Exploiting the inherent weaknesses of port security was central to petty crimes. But then, the change of attitude as a result of 9/11 placed the port in the category of a high risk target.

This can be viewed from two perspectives. First, the difficulty of states in controlling the sea. According to Germond (2010: 67), this is chiefly because “sea represents a space of liberty for criminal non-State actors, which can operate in a vast space without facing many police constraints”. Secondly, as a consequence of a port’s close

proximity to the sea and also often to an urban centre, it is potentially vulnerable as an easy target. As a port plays a pivotal role in trade facilitation, any small incident is expected to have an effect on a national economy. Hence 9/11 altered the perception of port security by drawing considerable attention to risks within a port and its hinterland, as well as the waterfront area that interfaces with the ship.

As the victim of 9/11 attacks, the US government moved decisively towards filling what was assessed to be a 'security gap' in the maritime sector, identifying the port as a 'soft spot', and introduced the Maritime Transportation Security Act (MTSA) in November 2002 and a wide range of unilateral measures. Concurrently, the US took a step further by pressuring the IMO for harsher measures. Pursuant to this, the IMO amended the SOLAS 74 and introduced the ISPS Code on 1 July 2004 – so creating a port security regime at the global level. The Code became a mandatory requirement to all the SOLAS 74 contracting parties as a security measure to safeguard the port and shipping sector from any form of threats particularly the act of terrorism. (A detailed explanation of the ISPS Code is provided in Chapter Four). Crucially the incident for the first time diverted the IMO from its central attention on shipping to ports, with special attention to port security measures.

Generally, the subject of security is complex in nature. This is primarily because security has been understood and regarded in different ways by different parties. This is particularly the case for port security as it is not a stand-alone entity but has many dimensions, as discussed in detail in Chapter Three. The 9/11 incident further amplified the notion of port security by translating it into various measures at different levels, which was not the case before. Port security was now perceived in a new dimension, broadening its spectrum from a local into a regional and international context.

Against this backdrop, the maritime world rapidly made adjustments to bolster the security of the port sector in view of its 'soft' nature, not only responding to the existing IMO regulations but also additional unilateral measures imposed by the US on its trading partners. The security focus for ports turned to dual objectives: to secure ports from any kinds of unlawful acts and to fulfil the new international security requirements. Compliance posed challenges and it has been argued in some studies such as Azuh (2007), UNCTAD (2007) and Ng and Gujar (2008) that these were

particularly strong in the case of developing nations. It was assumed that developing countries would find it difficult to respond to new port security requirements in the post 9/11 period. Notably in certain cases, as will be discussed Chapter Seven, the notion of a high risk to ports, through terrorism particularly, is perceived as slight and therefore created some resistance in accepting certain security regimes. This is especially seen in developing nations where these countries consider terrorist threats are chiefly directed at the US and its allies and do not very much concern or affect them.

1.2 **An overview of key literature**

The concept of governance, which refers to the systems, structures, processes, rules and regulations adopted and imposed by the government or shared with the related stakeholders for the purpose of achieving certain goals (Brooks and Cullinane, 2007: 10), provides a platform for the examination of the management of port security before and after 9/11. There are vast numbers of scholarly studies on the port sector in general and this thesis necessarily draws on some of these.[1] Much of the literature focuses on port governance, in particular questions related to privatisation and port management (Goss, 1979, Baudelaire, 1986, Frankel, 1987, World Bank, 2000, Coltof, 2000, Baird, 2002, Cullinane and Song, 2002, Tongzon and Heng, 2005, Brooks and Cullinane, 2007, Alderton, 2008). But these studies on governance still do not include developments in security, even though these are among the key elements that go along with other developments. In this connection, although the port authority plays an important role in port governance, the primary focus of separating its role from the private entities that take charge of operational activities on a commercial basis once privatised, was directed towards various strategies to strengthen the port performance and develop efficient organisation (Van der lugt and De langen, 2007).

The dominant interest in other aspects of the port management created a paucity of literature on matters concerning port security before 9/11. There are indeed few references in the literature in relation to practical features of security in the era before 9/11. A study conducted in Port of Miami, United States by Hawkes and Martin (1996) under the heading *Seaport Security* to some extent gives a broader overview

[1] While an extensive review of the relevant literature goes hand in hand within the discussion throughout the chapters in this thesis, the summary of the key literature here provides an overview about the key points in the existing main stream scholarship on ports and security issues.

concerning the practical application of security in the port environment. The study is a compilation of papers presented by various experts in port related activities sharing their views in securing the port from threats emanated from cargo theft, smuggling of drugs and stowaways apart from safety matters. In this study, Hawkes and Martin (1996) conclude that seaport security is to protect life and property and therefore the port management needs to consider various measures to protect the port. In another dimension, Ellen (1993) provides a list of traditional port crimes commonly took place before 9/11 and sheds light on some practical measures in UK ports under the heading *Ports at Risk*.

Menefee (1993) on the other hand, looked at port security before 9/11 especially in post World War Two period from a different perspective. He observed that in the global war and regional conflicts, a port was targeted to cause consequential damages in addition to other external threats from piracy, armed robbery and terrorism, but such prescience was exceptional.

As compared to the paucity of literature on port security before 9/11, the post 9/11 era produced a considerable amount of literature on maritime security, including port security and the host of protective measures adopted particularly the ISPS Code. *Port Security Management* by Christopher (2009), for example, explains the practical application of the Code in terms of planning, coordinating and managing it in the port. This includes the risk assessment process as well as the application of safety aspect in port facilities. Some studies demonstrated the effect of the ISPS Code on shipping and crews (Burmerster, 2005, Mejia, 2005 and Suppiah, 2009). However, with regard to port security, the focus was chiefly on the cost implication for the compliance parties. Several global studies were conducted (OECD, 2003, IAPH, 2006 and UNCTAD, 2007) for this purpose. The same matter was analysed by Dekker and Stevens (2007) at European Union (EU) level. Scholars like Bichou (2004) and Cook (2008) expanded consideration of such cost implications beyond the port by integrating into logistics and the supply chain. From the same perspective, UNCTAD (2003) studied the importance of multimodal transport in trade facilitation in order to improve the developing nations' participation in global trade. This study suggested that, given that compliance with the new security measures was unavoidable, this would undoubtedly provide a major challenge for most developing countries.

Notably however, such studies deal with global impact, rather than the practical impact of the required measures on port governance. As this study is related to port governance, it is of interest that within the scope of recent port authority studies, the paper on "Port Authority Strategy: beyond the landlord a conceptual approach" by Van der Lugt and De Langen, (2007) does not discuss at all how port authority strategy might be affected by new security requirements. Thus, there is a clear missing component in the treatment of port governance on port security, despite the fact that assurance of port security is now (2011) regarded as one of the central ways of strengthening a port's competitiveness (McKinnon, 2011). Even within the context of port authority functions, the landlord and regulatory function of a port authority, that goes along with fulfilling the security needs particularly in post 9/11 period, is given less attention than its changing role in facilitating and entrepreneurial responsibilities as in Verhoeven's (2010) paper.

There are relatively few studies of the effect of the introduction of post 9/11 port security regimes on particular ports, whether in developed or less developed countries. Those published include Harrald, Stephens and vanDrop (2004) and Pinto, Rabadi and Talley (2008) on US ports. These studies generally discuss on the impending threats' or risks to US ports following the 9/11 incidents and the security measures taken to protect them. Wengelin (2006) and Mazaheri and Ekwall, D (2009) examine security issues in Swedish ports. These studies highlight the impact of the implementation of the ISPS Code on Swedish ports. The same issue is analysed by Ng and Vaggelas (2012) in a comparative study of Hong Kong and Greece. Kent (2005) and Azuh (2007) consider the case of African ports. While Kent (2005) broadly points out the challenges and difficulties faced by African ports in implementing several security measures particularly the US initiatives, Azuh (2007) discusses specifically the practical process and problems of realising the ISPS Code in Nigerian ports.

While these studies relate to port security at a national level for their respective ports, Ng and Gujar (2008) contribute a general understanding of port security practices at supra-national level by considering these from an Asian perspective, providing some empirical evidence of the experience of the Asia Pacific Economic Cooperation (APEC) member economies and identify some of the difficulties of the Asian countries (where many developing countries are located) in complying with the ISPS

Code requirement. In the same vein, Pallis and Vaggelas (2008) approach the subject from the perspective of the EU ports. They explain the EU's approach to realising not only the ISPS Code but also the US measures.

Studies of port security in the context of Malaysian ports, including Port Klang, have been very selective and piece-meal. One such study analysing the financial implications of the ISPS Code for shipping and port sector in general is by Osnin (2005). Osnin later (2009) again analysed the same Code, this time looking at the implementation process with the cost implications for the related stakeholders. Even within the scope of modernising the Malaysian ports through port privatisation especially in the case of Port Klang, studies from Jamaluddin (2002) and Khalid (2007) conspicuously missed out the element of security. Hussin Shah (2006) conducted a study on terrorism in Malaysia by examining the Islamic militant movement Jemaah Islamiah (JI) which intends to establish Islamic hegemony in the Southeast Asia region. It is a study centred purely on land-based terrorism – an external threat - but never indicates any form of potential maritime terrorism or insecurity affecting the port sector.

The significance of this research on the Malaysian case is that it goes some way towards filling the gap in understanding of the impact on port governance of 9/11 beyond the cost implication which is missing in the numerous studies quoted above, as well as extending detailed knowledge of the impact of post 9/11 port security measures beyond the few national and supra-national studies, most of which do not deal with less developed economies, mentioned above. Port governance is not restricted to awareness of the applicable regulations. It also applies to those organisations and individuals responsible and accountable for the outcome of those activities. In the Malaysian case it is not limited to the Ministry of Transport (MOT) and the port authority but also includes the Marine Department, terminal operators and other interested players. By exploring the interrelated issues on port security, the study contributes to, as well as expands, knowledge of the Malaysian maritime sector in particular, as also issues of port governance in general.

1.3 **Aim and scope of study**

In its most general context, this research focuses on the impact of port security measures in response to 9/11. On the basis that 9/11 established a dividing line in differentiating the perceived threats and regimes imposed, the study endeavours to uncover how the impact of 9/11 was translated into rules and regulatory arrangements at different levels. It aims to establish how far there was a change in attitude which was subsequently reflected in policies and practices.

The study contextualises Port Klang within the Malaysian maritime system in a case study approach. Located in a close proximity to the Straits of Malacca (SOM), Malaysia has a long maritime historical background. In this sense, Port Klang particularly has undergone a tremendous change since the colonial era until this moment (2011). Its importance in terms of its impressive growth over the years and its capacity for handling a significant amount of domestic and international trade, established the port as Malaysia's premier port and one of the fastest growing ports among the developing economies. Such importance places Malaysia, especially Port Klang, in such a significant position that it could not simply escape from implementing the new security regimes. However, by virtue of its economic growth and national interest, the government and other interested players have to tackle a number of parallel challenges in order to realise the required policy measures.

The study has identified, and seeks to answer, the key question of "how has the event of 9/11 affected port governance", focussing on the case of Port Klang in particular and the Malaysian port system in general. In connection with answering the main question, several other subsidiary questions were formulated: (i) what were the perceived threats in Port Klang before and after 9/11, (ii) what were the security aspects and practices before and after 9/11, (iii) what were the changes in the institutional and legal arrangements for protecting the port and (iv) what were the implications and challenges of implementing various initiatives in safeguarding the port? Although the focus is primarily on Port Klang and the Malaysian port sector, the scope of the investigation begins with an examination of the international and supra-national/regional regulatory context in order to gain a broad overview of port security measures and an overview of how those measures were localised and impacted on related stakeholders. Central to the investigation is an examination of Malaysia's

ability to respond to the new port security requirements in the post 9/11 era, leading to the significant conclusion that the Malaysian experience undermines assumptions that developing countries would necessarily face difficulty here.

1.4 Structure of thesis

The thesis is organised into eight further chapters.

Chapter Two outlines the methodological approach. It deals with the choice of a qualitative and case study investigation and the process of collecting and analysing data. The discussion also includes the author's ethical considerations and his evaluation of the limitations encountered in the process of conducting this research.

Chapter Three provides an introduction to various concepts and definitions in relation to ports and the significance to trade and economy. This includes developments in shipping and the changing trend of port modernisation. The explanation of the relevant concepts is considered essential to provide a clear understanding of how port security is perceived in the maritime sphere. In relation to this, the chapter elaborates the situation of port security before 9/11 and considers several security regimes practised during this era.

Chapter Four deals with port security measures in post 9/11. It explains the consequential effect of 9/11 on the global maritime industry. This prompted the introduction of a number of security regimes at different spatial levels. The chapter also highlights the prominent role of the US in influencing international organisations to adopt harsher measures as well as undertaking unilateral initiatives to further strengthen its own security protection. The discussion brings to light how some of the key regimes were then translated to fit in the local context, as described in subsequent chapters.

Chapter Five provides a broad understanding of Malaysian maritime sector and its port system. It explains the contribution of the key sub-sectors within the maritime sector which also includes the ports and shipping sector in the Malaysian economy. More importantly, the chapter provides an understanding of the development of the port sector and its related policies. By doing so it takes us to the next chapter for further expansion.

Chapter Six is devoted specifically to Port Klang. It explains the port governance and early security issues. In this respect, the chapter explores the port's early development in a brief historical background so as to provide a solid basis to comprehend its evolution over time. It then explains a number of security measures implemented and the perceived threat before 9/11. Seemingly, the Port Klang's proactive security setting way before 9/11 set a good foundation to adopt and adapt the post 9/11 regimes with less difficulty.

Chapter Seven focuses on security governance in Port Klang in particular and Malaysia in general after 9/11. It explores the various port security regimes, mainly originating from 'competent' international organisations like the IMO to which Malaysia is a party and has had to implement in the national/local context. The chapter considers how the ISPS Code was implemented according to the local needs and environment, which in some cases went beyond the international practice. The chapter further examines the impact of other US regimes such the Container Security Initiative (CSI) and the Megaport Initiative that were brought also into effect.

Chapter Eight focuses particularly on the operational impact of the post 9/11 security regime. It presents the research findings from various interview responses, which include the practical problems and challenges as a result of realising certain policy decisions. The chapter highlights the consequences for government and other players of the post 9/11 measures.

Chapter Nine highlights the wider implications of the results presented in Chapter Seven and Eight and concludes the thesis by presenting the multi-directional and multi-dimensional challenges following on the change of attitudes and practices to port security in the Malaysian port system that resulted from 9/11. By examining the empirical evidence from the practical aspect of policy measures, the study stands as a good testimony of the Malaysian port governance success in maintaining a robust port security system among the developing nations. Nonetheless the thesis also observes certain shortcomings in the existing security system that can maybe anticipated for further improvements.

CHAPTER TWO

RESEARCH METHODOLOGY

2.1 Introduction

The objective of this chapter is to present the philosophical approach as well as the methods employed in this research. In order to give a clear picture of the methodology applied to the study, this chapter first of all sets out the rationale for the philosophical approach, a case study strategy and the qualitative methods used. There follows a detailed account of the process of interview covering ethical issues and the manner it was conducted. Other forms of data collection and the process of data analysis are presented subsequently before concluding the chapter.

2.2 Philosophical approach

In undertaking any research, the question of a paradigm or world view is considered essential in finding answers for what we are researching on and meeting the objective. This is because a paradigm is a basic set of beliefs that guide action for this purpose. Wisker (2001:123) argues that a research paradigm or perspective is an underlying set of beliefs about how the elements of the research area fit together and how we can investigate it and make sense of our discoveries through logical conclusion. With this in mind, Saunders, Lewis and Thornhill (2009: 106) states that the question of research method is of secondary importance. Instead the appropriate method is determined first by the question of a paradigm. Guba and Lincoln (1994) cited in Saunders, Lewis and Thornhill (2009: 106) note:

> Both qualitative and quantitative methods may be used appropriately with any research paradigm. Questions of method are secondary to questions of paradigm, which we define as the basic belief system or world view that guide the investigation, not only in choice of method but in ontologically and epistemologically fundamental ways.

Holding to this view, the research philosophy adopted determines our world view or paradigm, thus underpins the research strategy and the method we choose in conducting research (Saunders, Lewis and Thornhill, 2009: 108). On this basis, Maykut and Morehouse (2000: 2) emphasise that without any philosophic

background, a qualitative researcher may be left without the conceptual tools to think through problems and issues as they arise.

There are two main research philosophies underpinning any research. One is ontology and the other is epistemology. The former relates to the nature of reality. It explains the assumptions researchers have about the way the world operates and the commitment held to particular views (Saunders, Lewis and Thornhill, 2009: 110). In other words, ontology's concerned with what we know about the world or social reality and whether social reality exists independently of human conceptions and interpretations or not (Ritchie and Lewis, 2003: 11-13). The latter narrates the acceptable knowledge in a particular field of research and its relationship between the researcher and the matter being researched (Creswell, 2007 and Saunders, Lewis and Thornhill, 2009). In other words, it is a question of what represents knowledge or evidence of entities in the social world that is being investigated (Mason, 1997:13).

Both these philosophies will ultimately decide and influence the subject being researched. And this influence translates into four different world views which will be considered before deciding the appropriate method employed for any research (Creswell, 2009). The four paradigms are positivism, constructivism/interpretivism, advocacy/participatory and pragmatism. *Positivism* is applicable to quantitative research where the research needs to be objective in proving the theory or hypothesis. This type of research is categorised as deductive. For this, a theoretical or conceptual framework is developed, followed by a test using data to verify the hypothesis or theory and finally construct a specific conclusion (Saunders, Lewis and Thornhill, 2009: 61 and Silverman, 2005a: 4). *Constructivism* is focused on qualitative research in which a researcher is required to interpret the meaning. This type of research is subjective in nature and categorised as inductive. The inductive approach does not start with any predetermined theories, hypotheses or conceptual frameworks although the research has a clearly defined purpose with research question(s) and objectives (Saunders, Lewis and Thornhill, 2009: 61 and Silverman, 2005a: 4). With an inductive approach (as oppose to deductive), the researcher explores data or collects data prior to developing theories or hypotheses as conclusions (Saunders, Lewis and Thornhill, 2009: 61). The *advocacy/participatory* paradigm emphasises action research which is more like applied research. This type of research is carried out by

the practitioners who themselves identified a need for a change or improvement within the system they have engaged in (Bell, 2006: 8). Tashakkori and Teddlie (1998), and Creswell (2009) believe *pragmatism* is another set of paradigms utilising a mixed method approach. Creswell (2009:10) contends that pragmatism is not committed to any one system of philosophy and reality but applies mixed methods which comprise both quantitative and qualitative approaches.

According to Ritchie and Lewis (2003: 15) there is no definite answer as to which world views are the most appropriate, instead it depends upon how the researcher conducts the research effectively within the chosen world view.

Taking the ontological position, my research fits in the context of realism where there exists a distinction between beliefs about the world and the way the world functions (Ritchie and Lewis, 2003: 16), by looking at security threats before and after the 9/11 events. In reality, threats in port often differ due to various factors. However, any damage leads to numerous repercussions to many interrelated parties. The epistemological stance indicates that, the knowledge is acquired through inductive approach where interpretation plays a crucial role by taking cognizance that the "social world is not governed by law-like regularities but is mediated through meaning and human agency; consequently the social researcher is concerned to explore and understand the social world using both the participant's and the researcher's understanding" (Ritchie and Lewis, 2003: 17).

The study of port security has been handled within different philosophical approaches by different researchers depending upon the core issues researched. Burmester (2005) researched the ISPS Code with a positivism approach by employing quantitative method by using questionnaire, while Wengelin (2006) employed an interpretivist approach by using interviews as a primary method for the Swedish port security study. A similar approach is adopted by Azuh (2007) in Nigerian ports and Ng and Vaggelas (2012) in Hong Kong and Greece ports. However, Mazaheri and Ekwall (2009) who studied the impact of the ISPS Code on Swedish ports adopted a mixed approach characterised by both positivism and interpretivism by using questionnaire and interviews.

This study adopted the interpretative paradigm similar to some researchers above which is more appropriate in the examination of peoples' words and actions in a narrative or descriptive way (Maykut and Morehouse, 2000: 2). Such a paradigm was appropriate for this research needs. Since the study deals with the change of attitude and practices that have impact on policy measures, the approach provided a good ground to analyse the responses and reactions of the respondent. In line with this view, a case study strategy has been adopted using a range of qualitative methods. This will be discussed in the following section.

2.3 **Methodological strategy**

This section discusses two dominant strategies in this research project. These are a case study approach and a qualitative method. The following explanation touches briefly on the understanding of these two approaches, their relevance and how they have been applied throughout the research.

2.3.1 **Case study approach**

According to Saunders, Lewis and Thornhill (2009: 145) a case study is defined as "a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence". In addition, the case study in effect can be a unit of analysis (Miles and Huberman, 1994: 25).

Gerring (2007: 17) suggests that the characteristics of a case study are:

> (a) that its method is qualitative, small-N (b) that the research is holistic, thick (a more or less comprehensive examination of a phenomenon), (c) that it utilizes a particular type of evidence (e.g., ethnographic, clinical, nonexperimental, non-survey-based, participant-observation, process-tracing, historical, textual, or field research), (d) that its method of evidence gathering is naturalistic (a "real-life context"), (e) that the topic is diffuse (case and context are difficult to distinguish), (f) that it employs triangulation ("multiple sources of evidence"), (g) that the research investigates the properties of a single observation, or (h) that the research investigates the properties of a single phenomenon, instance, or example.

In the same vein, Creswell (2009: 13) argues that under the case study strategy the researcher explores in-depth a program, event, activity, process or the actions of one

or more individuals. In this instance, the researcher is bounded by time and activity and collects detailed information using a variety of data collection procedures over a sustained period of time. McNabb (2004: 359) and Miles and Huberman (1994: 26) pointed out that the case study approach can be used for identifying a previous condition or conditions that lead or contribute to a phenomenon or events or processes occurring over a specified period. According to Yin (1994: 3-4) this approach can involve an exploratory, descriptive or explanatory strategy depending upon the type of research question, the degree of control over actual behavioural events and the degree of focus on contemporary as opposed to historical events. This type of research strategy usually formulates questions on 'how', 'why' and 'what' to generate answers.

The brief explanation above suggests that a case study approach can be used as a strategy to explore events or phenomenon of the past or processes occurring over a specified period of time. For this reason, this research employs a case study as the main research strategy, investigating Port Klang in Malaysia.

According to Silverman (2007: 304) "very often a case will be chosen simply because it allows access". The choice of Malaysia was clearly influenced by my national background and fluency in the Malay language. As a former official of the MOT, I found that access to Port Klang was made easier with the support of the MOT and the contacts that I had. It would be difficult for outsiders to get access and conduct research in this port, especially since it touches on the sensitive subject of port security. At the same time, it must be recognised that my official identity posed a potential problem for the conduct of research; an issue which is discussed later in this chapter.

Ease of access was not, however, the prime reason for selecting the Malaysian Port Klang as the subject for study. As a developing country with strong foreign trade interests, Malaysia was an appropriate choice for an investigation into the impact of 9/11 on national maritime security policy. As the detailed picture of the Port Klang provided in Chapter Six shows, on the basis of its premier position this port was the obvious candidate within this country for an in-depth study of port security.

A case study is predominantly used in relation to discovery of information using an inductive logic and less in testing of theory which is deductive logic (Denscombe,

2008, 38-39). On this premise, the case study approach employed here attempts to explore port security issues before and after 9/11. It is therefore an exploratory study where the method requires discovering, understanding and describing new issues rather than just finding explanations. This type of exploratory study that goes along with qualitative method (as explained below) is also appropriate in studies dealing with an understanding of policy in a dynamic and complex environment such as the impact of 9/11 on port security. Correspondingly, Rist (2003: 632) approves this by noting:

> The contributions of qualitative research can be pivotal in assessing the consequences of the policy and program initiative…Qualitative research allows for the study of both anticipated and unanticipated outcomes, changes in understandings and perceptions as a result of the efforts of the program or policy, the direction and intensity of any social change that results from the program, and the strengths and weaknesses of the administrative /organizational structure that was used to operationalize the program.

As one of the objectives of this study is to analyse the impact of various security regimes on government maritime policies, thus the selected strategy would be able to handle this effectively. Since policy issues are not simple and straightforward, they demand an in-depth understanding. The required findings could best be obtained through relatively a free flow of discussion and interaction with key informants.

By adopting a case study approach, this research does not attempt to make generalisations. Each port has it own features because of its geographical location, type of cargo handled and support received from the authority or government which often differs from one port to another. To some extent, variations in the physical structure of ports also determine the exposure to and the causes of security threat which is obviously not consistent from one port to another. In view of these considerations, the findings or conclusions are therefore best applicable to this case only, although in some instances they may be relevant to situations where there exist common characteristics. According to Denscombe (2008: 299) there are fewer tendencies to generalize the findings of the qualitative study in another instance or case; nonetheless this can be overcome through 'transferability'. This means, the reader makes his or her own judgment through an imaginative process to apply these in other comparable instances. Denscombe (2008: 299) stresses that it is a question of

"to what extent *could* the findings be transferred to other instances rather than to what extent *are* the findings likely to exist in other instances".

2.3.2 **Qualitative method**

Essentially methods are techniques adopted in conducting research, such as statistical analysis for quantitative method and observation and interview for qualitative method (Silverman, 2005a). According to Flick (2006: 27) and Denscombe (2008: 38) a case study approach can be conducted both qualitatively and quantitatively. This flexibility allows more than one research method. However Flick (2006) and Denscombe (2008) suggest that a case study approach is nevertheless more aligned with qualitative research methods than quantitative research methods. It is worth noting that there is no right or wrong methodology. It all depends upon what we are trying to find out through the method used. This investigation is more suitable for a qualitative approach as it requires an in-depth understanding of a complex process where stakeholders' (individuals and institutions) views can be obtained effectively through observation and interviews.

Qualitative study inherently requires a wide range of understanding. For Silverman (2010: 389) qualitative research is 'to say a lot about a little'. But a generic and acceptable definition of qualitative method is posited by Denzin and Lincoln (2003: 4-5):

> Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that makes the world visible. These practices transform the world. They turn the world into a series of representations including field notes, interviews, conversations, photographs, recordings and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them.

In another context, Easterby-Smith, Thorpe and Lowe (1996: 71) define qualitative methods as 'an array of interpretive techniques which seek to describe, decode, translate and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world'. In a similar tone, Ritchie and Lewis (2003: 3) pointed out that qualitative research relates to a naturalistic and interpretative approach concerned with understanding the meanings

which people attach to phenomena within their social world by noting "the way in which people being studied understands and interprets their social reality is one of the central motifs of qualitative research".

In line with this, Creswell (2009:4) also observed that qualitative is more than exploring data. He asserts that it is:

> A means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. The process of research involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data. The final written report has a flexible structure. Those who engage in this form of inquiry support a way of looking at research that honours an inductive style, a focus on individual meaning and the importance of rendering the complexity of a situation.

The underlying philosophy of qualitative research is ''interpretive'. It involves data generation rather than producing data in a rigid and restricted form of experimental method. This approach aims to produce rounded understandings on the basis of rich, contextual, and detailed data. There is more emphasis on 'holistic' forms of analysis and explanation than on charting surface patterns, trends, and correlations. Qualitative research usually does use some form of quantification, but statistical forms of analysis are not seen as central (Mason 1997:4). Notably the qualitative method is very subjective in nature. Hence it employs numerous means such as case study, personal experience, interview and observation and the researchers deploy a wide range of interconnected interpretive practices to gain a better understanding of the subject matter.

This study does not employ questionnaires or aims at making predictions based on hypotheses or theory testing as commonly adopted in quantitative study. No statistical instruments are used to analyse data as well. Instead it utilises the published statistical information obtained from various secondary sources that include web sites of the agency concerned, bulletins and other printed material. More attention and focus will be given to interpret and understand the meaning of the situation and issues concerned rather than to measure the changes in figures.

The qualitative approach deals with three components which include (i) perceptions or meanings, (ii) attitudes and beliefs, (iii) feelings and emotions. The process of this approach focuses its effort on extracting human experiences that are pure, basic and raw (Denscombe, 2008: 75-77). Such "pure, basic and raw" human experiences are exactly what this research needs. Interviews, discussions and observations were the methods employed for this study. The interview conducted in the "field" has well served the purpose designed for this investigation as it gathered personal perspectives, thoughts and experiences and observations from number of stakeholders.

Furthermore, as the core subject of this study pertains to security which involves some "phenomenon", something experienced directly rather than being conceived as some form of abstract concept or theory (Denscombe, 2008: 77), it is therefore more appropriate that this research is conducted primarily by using a qualitative methodology. Easterby-Smith, Thorpe and Lowe (1996: 71) assert that this type of qualitative method involves in-depth interviews. They suggest that interviews help to understand how individuals construct the meaning and significance of their situations from the complex personal framework of beliefs and values which they have developed over their lives in order to help explain and predict events in their world. In other words, the primary purpose of the interview is to understand the meanings interviewees attach to the issues and situations in contexts. An interview is not merely a component of discussion but as Mason (1997: 38) notes, it is a 'conversation with a purpose'. Easterby-Smith, Thorpe and Lowe (1996: 73) accentuate that such kind of 'conversation with a purpose' provides "the opportunity for the researcher to probe deeply to uncover new clues, open up new dimensions of a problem and to secure vivid, accurate inclusive accounts that are based on personal experience".

Any research method has its own strengths and weaknesses. No single method essentially possesses just one distinctive quality. The discussion thus far has given an insight into the positive aspects of the qualitative method. Nevertheless this method has some weaknesses. It has been criticised on the grounds that since interpretation is bound up with the 'self' of the researcher, there is a possibility of decontextualizing the meaning. There is also a danger of oversimplifying the explanation. Other potential problems are the longer analysis time period, the difficulty of cross-checking together with the possibility of selective reporting and the resulting risk of distortion

(Bell, 2006: 11 and Denscombe, 2008: 312). Considering all these views, the strength of this approach nonetheless stands out for itself. This has been pointed out by scholars such as Yin (1994), Mason (1997), Silverman (2005a) and Flick (2006), and is also borne out by the successful experience of this research.

However, this type of study can possibly be approached in different ways as alternatives to the one adopted here. For example as mentioned earlier, some other researchers have employed quantitative or mixed method approach. Thus, this study can also be approached through questionnaires that can be achieved by distributing them in person, by post, via email or through web-based format (Denscombe, 2008: 8-9) in order to collect the respondent's views, experiences or observations on threat level, security practices and policy measures as well as statistical data.

However, due to the constrained resources including time and funding, I found that the alternative strategy would not be appropriate. Instead, the employment of a qualitative approach provided an additional advantage for interviewing personally the key informants and getting their actual reactions towards certain measures. Further, as most of the selected informants held key positions in their respective agency, getting a fair amount of feedback through questionnaires would not be feasible due to their busy engagements in official duties. As Denscombe (2008: 170-171) succinctly points out, questionnaires can be frustrating for respondents and thus, deter them from answering. It offers a little opportunity for the researcher to check the truthfulness of the answers given by the respondents. Furthermore, the "pre-coded questions can bias the findings towards the researcher's rather than the respondent's way of seeing things" (Denscombe (2008: 170).

2.4 **The process of data collection**

This section provides an account of the process of data collection for this research project. The investigation employed several methods in gathering both primary and secondary data as noted in detail below.

2.4.1 **Primary research**

2.4.1.1 **Observation**

Primary data for a qualitative approach can be obtained through interviews, conversations, photographs, recordings, memos, documents, visual aids and so on (Mason, 1997 and Denzin and Lincoln, 2003: 4). Primary data for this research project was predominantly collected through interviews with key informants from various organisations that had been identified as pertinent stakeholders, but observation also had a role where it involves in interpreting people's behaviour or practices in security measures (Saunders, Lewis and Thornhill, 2009: 288).

The Field work was conducted in Malaysia over a period of two and half months, from 21st May to 5th August 2010. Map 2.1 below shows the main locations covered during the field trip, included Kuala Lumpur, Putrajaya, Port Klang, Kuantan Port and Johor Port. Putrajaya is the Federal Government Administrative Centre located approximately 40 kilometres south of Kuala Lumpur. Kuala Lumpur is the capital city of Malaysia. Port Klang on the other hand is located 38 kilometres southwest of Kuala Lumpur and 40 kilometres from Putrajaya. A significant amount of field work was covered within the circle of Kuala Lumpur, Putrajaya and Port Klang in the Peninsular Malaysia as most of the institutions/organisations are located here. Apart from this, additional visits were conducted to Johor and Kuantan Port, outside of the focus areas as shown in two arrows in the map. Other Federal ports in the Peninsular as well as in Sarawak (West Malaysia) were unable to be covered due to limitations of funding and time.

Map 2.1: Locations Visited During the Field Trip

Source: The National Maritime Portal, 2009
Note: The point which refers to Port Klang also covers Kuala Lumpur and Putrajaya as they are closely located within the region of 40 kilometres. The land distance from Kuala Lumpur to Kuantan Port is approximately 300 kilometres whereas from Kuala Lumpur to Johor Port it is about 400 kilometres.

The main focus of this field trip was to conduct interviews with informants, but it was also an opportunity to receive briefings and to observe the situation in the ports. Two terminal operators of Port Klang, Northport and Westport, provided briefing on port security operations and also allowed my direct observation of the practical security measures which built upon other information. The briefing provided a good understanding on how the security system works in the port. However, the direct observation of practical applications provided some insight into the whole mechanism and assisted preparation for interviews. It also provided a good ground to interpret how the policy measures were then translated into practice. Nonetheless permission was not given for taking any photographs due to security reasons. This however, did not affect the quality of research in any manner, as the study primarily focused on the process of measures rather than technical aspects that needed to be demonstrated by static images.

Furthermore during the field trip, I was given an opportunity to participate as an observer in a port security programme entitled CAPEX 2010 organised by the Johor

Port Authority which was held at their premise on 15th to 17th June 2010. This was a two-day intensive ISPS exercise programme mandated by the IMO as part of the ISPS Code mandatory requirements. The main participants were seven port terminals from the State of Johor operating under the licence of Johor Port Authority. A large number of port security officers from different ports in Malaysia were also invited as observers. The programme was basically a simulation exercise in dealing with terrorist attacks in the port. This was another avenue that provided first hand information on how a situation would be handled in the event of a terrorist attack in Malaysian ports. The information was useful for eliciting answers on security awareness and perception of threat level during the interview process.

My visit to CAPEX 2010 programme also provided an opportunity to observe the Johor Port in Pasir Gudang which locates in the southern part of Peninsular Malaysia. This is another major port on the Federal port list. I also made a visit to Kuantan Port hence another opportunity to obtain a short briefing and subsequently observed its security system. Located in the eastern region of Peninsular Malaysia, this is another port under the same purview of the Federal government.

The purpose of visiting other Federal ports in addition to Port Klang was essentially to gain greater background knowledge about security implementation in the country and to increase my understanding of the implications and perceptions of security threats in the port environment during the period covered by this study.

2.4.1.2 **Selection of institutions and organisations**

The selection of various institutions as a sample for this research was given much thought. Saunders, Lewis and Thornhill (2009: 243) suggest that the choice of sampling technique depends upon the feasibility of addressing the objective of the study. As the study aims to look into the impact of 9/11 on port governance in terms of implementation and implication of various security measures from a policy perspective, the key stakeholders were identified on the basis of non-probability sampling by adopting a purposive or judgemental sampling technique. Saunders, Lewis and Thornhill (2009: 233-239) claim that this type of sampling is suitable for a case study investigation to explore and gain theoretical insights. A range of institutions and organisations were identified as key stakeholders in port security for

the Malaysian case. The actors within the identified institutions play significant roles in the formation and implementation of port security measures and policies. Their opinions and behaviours have a profound influence on both policies and practices with regards to port security.

Table 2.1 sets out the institutions or organisations selected and briefly highlight their primary roles. These are segregated into categories of policy making, implementing/enforcing policy, port regulatory, terminal operator, port/shipping user, maritime interested player and port workers. Respondents are categorised according to their roles as well as their participation, either directly or indirectly, in port security. The MOT is the highest level of body in policy drafting with implementation subsequently passed down to other relevant agencies for enforcement. Similarly, the National Security Council (NSC) under the Prime Minister's Department is the authority for national level security matters. The port authority is the agency that regulates port policies as instructed by the Ministry and supervises the port operators who are the private players. The Malaysian International Shipping Corporation (MISC), the Federation of Malaysian Freight Forwarders and the Malaysia Shipowners Association (MASA) are the stakeholders use the facility for trade purpose. The Maritime Institute of Malaysia (MIMA) and International Maritime Bureau (IMB) are other maritime interested players who contribute policy advice and input at various levels. Port workers are human capital who is involved in day-to-day port operations.

Table 2.1: The Institutions and Organisations Participating in this Study

Institution	Main function	Specific roles
Ministry of Transport (MOT)	Policy making	• Formulate policies relating to navigation safety, as well as development and operation of sea transport, ports and shipping. • Study, review and draft laws relating to ports and shipping and to ratify related maritime international conventions. • Coordinate intersectoral maritime activities towards the creation of an integrated ocean management.
National Security Council (NSC)	Policy making	• Formulate polices and directives for national disaster.

		• Coordinate with leading agencies in mitigating any national crisis including terrorist attacks • Secretariat for the national level ISPS Code committee.
Marine Department	Policy implementation and enforcement	• Appointed as the Designated Authority for the ISPS Code implementation. • Enforce safety of navigation measures.
Selangor Royal Malaysian Customs	Policy implementation and enforcement	• Enforce Container Security Initiative (CSI) • Enforce Megaport initiative • Implement cargo security measures
Malaysian Maritime Enforcement Agency (MMEA)	Policy implementation and enforcement	• Carry out air and coastal surveillance • Enforce law and order under any federal law • Prevent and suppress all forms of illicit activities at sea.
Port Klang Authority	Port regulating	• Issue license to terminal operators in operating the port • Implement and enforce all government policies with regards to port matters • Appointed as Maritime Transport Security Officer (MTSO) under the ISPS Code
Kuantan Port Authority	Port regulating	• Issue license to terminal operators in operating the port • Implement and enforce all government policies with regards to port matters • Appointed as Maritime Transport Security Officer (MTSO) under the ISPS Code
Johor Port Authority	Port regulating	• Issue license to terminal operators in operating the port • Implement and enforce all government policies with regards to port matters • Appointed as Maritime Transport Security Officer (MTSO) under the ISPS Code
Northport (Port Klang)	Terminal operator	• Operate port in capacity of a private entity • Implement all security measures as required by the port authority • Appointed as Maritime Facility Security Officer (MFSO)
Westport (Port Klang)	Terminal operator	• Operate port in capacity of a private entity • Implement all security measures as

		required by the port authority • Appointed as Maritime Facility Security Officer (MFSO)
Malaysia Shipowners' Association (MASA)	Shipowners Association (port/shipping user)	• Protect and promote the common interests of Malaysian ship owners. • Express any issues relating to ship owners interest to the government agencies
Federation of Malaysian Freight Forwarders/Selangor Freight Forwarders	Freight Forwarders Association (port/shipping user)	• Promote and protect the common interests of members of the association to work closely with the private and government agencies • Provide a forum for discussion of all matters and questions affecting the interests of the members. • Provide commercial, industrial, business and trade services to the members.
Malaysian International Shipping Corporation (MISC)	Shipping line (port/shipping user)	• Operate shipping services around the world
Maritime Institute of Malaysia (MIMA)	Policy adviser and think-tank for government (Maritime-interested players)	• Look into matters relating to Malaysia's interest • Serve as a national focal point for research in the maritime sector. • Deal with national, regional and global maritime matters affecting Malaysia. • Complement the efforts of the various government agencies involved in the maritime sector by mobilising expertise to assist and support them in national maritime policy planning and implementation.
International Maritime Bureau (IMB)	International Piracy Reporting Centre (Maritime interested players)	• Report piracy incidents around the world • Act as the first point of contact for the shipmaster to report an actual or attempted attack or even suspicious movements of piracy thus initiates the process of response. • Work closely with various governments and law enforcement agencies and share information about piracy.
Westport and Northport workers	Port workers	• Work in day-to-day port operations

Source: constructed by the author with data collected from the field work

2.4.1.3 **Selection of informants**

According to Denscombe (2008: 174) not all cases of qualitative research require the interview method, but this method would be more appropriate for exploring complex and subtle phenomenon. He considers that "if the researcher wants to collect information on simple and uncontroversial facts, then questionnaires might prove to be a more cost-effective method. But when the researcher needs to gain insight into things like people's opinions, feelings, emotions and experiences, then interview will almost certainly provide a more suitable method". Considering this research requires an understanding of the background to and effects of various port security measures during the two targeted periods, getting people's opinions, feelings, and experiences in this respect are certainly needed. Therefore, I decided to use the interview as a key method for data gathering.

As with the selection of institutions and organisations discussed above, the selection of key informants attached to these was on the basis of non-probability sampling as stated earlier where the choice of those to be included is not a random selection. In this context, the feature of purposive sampling technique provides a space to look for issues of interest and suggests that the sample can be 'hand picked'. This approach allows the researcher to identify in advance certain people and deliberately select those most likely to produce some valuable data (Denscome, 2008: 17, Silverman, 2005a: 250). Moreover Silverman (2007: 309) observes that this type of sampling permits the researcher to manipulate their analysis, theory and sampling activities interactively during the research process.

Hence, for this research project the selection of key informants was on the basis of those who were directly involved, took charge or affected by security matters. My attachment to the Ports Unit of MOT for more than five years, before being promoted and transferred to the Malaysian Maritime Enforcement Agency (MMEA), provided a good basis in establishing some connections to the informants prior to this study. This group were mainly from the port authorities, port terminals and a few other government agencies.

For other informants whom I had never met before, assistance was sought from the officials interviewed to introduce them. This was done either through email or

telephone calls. In some cases, I was introduced personally to the individual concerned. Under this circumstance, snowball sampling was adopted where sample emerged through a process of reference from one person to another (Denscome, 2008: 17).

Since this study involves a qualitative approach, according to Maykut and Morehouse (2000: 62 - 63), this type of research does not involve a large number of samples. They argue that normally for in-depth interviews, twenty-five people were necessary before a researcher to reach the saturation point. Nevertheless, this is not an ideal number but depends on the process of analysis until no new information is found. Additionally, it has to be balanced with limitations of time, money and other logistical factors that may impinge the research. On that basis, the study identified twenty-eight individuals and two groups as the key informants from fifteen different organisations to provide a sufficient amount of information. All twenty-eight were interviewed individually, while two group interviews were held with port workers from Northport and Westport of Port Klang. Figure 2.1 and 2.2 illustrate the distribution of informants by category in terms of number and percentage.

Figure 2.1: Number of Key Informants by Category

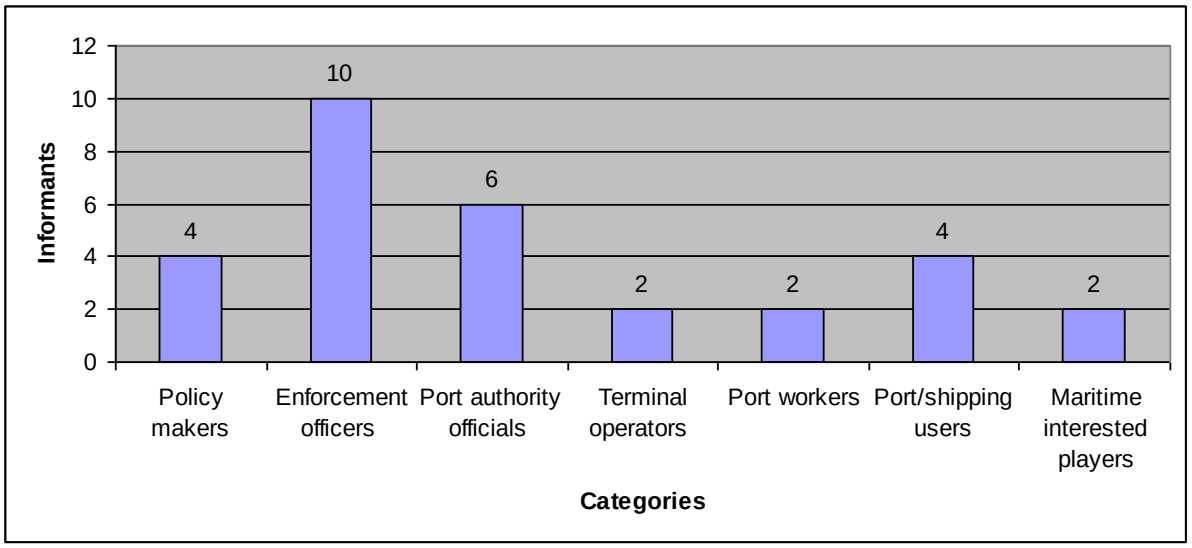
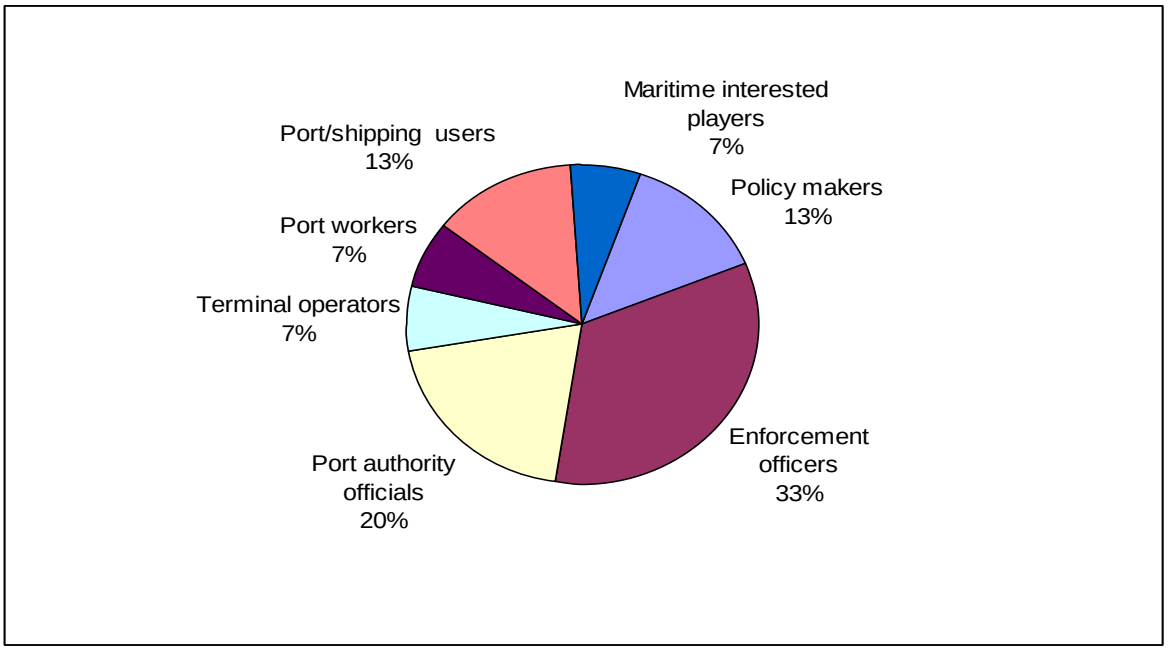


Figure 2.2: Percentage of Key Informants



Essentially each category of key informants plays different roles in terms of realising and experiencing the effect of port security policies in different ways. In this order, 33% or the biggest single percentage of those interviewed were enforcement officials and smallest number of 7% each represents terminal operators, port workers and maritime stakeholders. 20% of interviewees were from port authorities and the balance was from the port/shipping users and policy makers, represented 13% each.

The representation of informants according to category may seem unbalanced, but as the study looked at the implementation and implication of policy measures, a larger number of enforcement personnel were approached for more insight into this aspect. This was primarily because the enforcement personnel were more aware of the practical aspect of this matter on the ground. As there are only two terminal operators in Port Klang, consequently two heads of security officials represented one from each terminal. For the port workers, only two groups were drawn from these terminals. Each group is considered as one entity for easy segmentation. The selection of informants from two important maritime players, that is, MIMA and IMB, was on the basis of their prominent role in security related matters and in the provision of policy advice at domestic and international platform. Apart from the Port Klang Authority, two other port authorities were approached to enrich and strengthen the information required for this study. The MASA, Federation of Malaysian Freight

Forwarders/Selangor Freight Forwarders, and MISC provided information on port/shipping users' perspective. On the hand, the key informants from the MOT and NSC provided data on the policy makers' perspective.

2.4.1.4 **The interview process – ethical issues**

In any research, ethical consideration plays a prominent role in determining whether the researcher has conducted the research professionally taking into account data collection, the analysis process, reporting the findings and researcher's connection with the people and fields they intend to study (Flick, 2006: 45 and Denscombe, 2008: 141). As such, ethics rightly refers to appropriateness of the researcher's behaviour in relation to the right of those who become the subject of research work or affected by it. Ethics has been linked as:

> The norms or standard of behaviour that guide moral choices about our behaviour and our relationships with others. Research ethics therefore relates to questions about how we formulate and clarify our research topic, design our research and gain access, collect data, process and store our data, analyse data and write up our research findings in a moral and responsible way (Saunders, Lewis and Thornhill, 2009: 184).

Accordingly, those approached for interview in this research were provided with a Participant Information Sheet (PIS). (See Appendix I). The PSI provided information on the research objectives and gave an assurance to the respondents that the information provided would be confidential and would not be divulged or used for any other reason except for this research, in accordance with the UK Data Protection Act 1998. The informants were given the option to withdraw at anytime before or during the process of interview or refuse to answer any of the questions on their own accord as their participants are on voluntary basis. A Consent Form offered the informants an opportunity to agree (or not) to their participation in the study and was signed by the interviewee. (See Appendix II). They were also asked to agree to the recording of the interview session through the use of a digital audio recorder. Both the PSI and Consent Form had received prior approval from the University of Greenwich Research Ethics Committee (UREC).

In addition, the informants were notified that I was a government employee conducting this research with a government scholarship but in a capacity of a student,

without any government or commercial interest involved. A supporting letter from the Public Services Department of Malaysia endorsed this statement. By taking this measure, the informants were given an assurance that under no circumstances during the course of research my status as a civil servant would be allowed to compromise my academic standing as a researcher. The informants were also assured that any information they gave would not be used to threaten or obligate them in any way.

2.4.1.5 **The interview process – conduct of interview**

It is noteworthy, that the supporting letter provided by the MOT (see Appendix III) carried a considerable weight in facilitating access to various institutions and gained cooperation from the parties concerned without necessarily affecting my status as a researcher, as it emphasises my academic role as a research student.

The interviews with informants were conducted for approximately forty-five minutes to one and half hours. In order to maintain confidentiality of the collected data, all interviews were conducted in a separate room of the informants' office premises without disturbing other individuals. The conduct of the interview provided an assurance to the informants that the research was carried out professionally and data was secured only to the researcher. The interviews with the informants were conducted in English as most of them were professionals and possessed a relatively good command of English language. But in some cases, the informants tended to mix the English discussion with the Malay language, the national language of Malaysia. In certain circumstances, however, the interviews took place purely in Malay, especially in my interviews with the port workers due to their limited English language proficiency.

As pointed out earlier, although gaining access to the agency identified was not a major problem, an obstacle emerged in getting appointments with the informants in the latter part of the field trip. As most of them were senior officials, they were always engaged in a busy working schedule. This required a lot of patience to get an appropriate date and time that fitted them well. On some occasions, the date and time fixed earlier had to be changed to another date due to a last minute pressing issue for the informants.

Another hurdle encountered during the process of interview was, notwithstanding the interview took place in a separate room, in certain circumstances discussions were interrupted by the informants' phone calls or request for meetings. In such a situation, our discussions were stopped and resumed at a later time. The interview was made more difficult for informants from the Port Klang Authority where it had to be conducted in two parts in different days according to their flexibility because of their busy engagement in official duties.

In addition to this, certain informants, governmental and private, proved cautious in sharing information and documents. This appeared quite obvious during sessions with the terminal operators. This primarily because, I was considered an 'outsider' and the research was not conducted for their own interest or mandated by government for any specific reason.

Nevertheless, as much as possible, the interviews were recorded with a digital device. An exception was one informant who refused to be recorded in order to maintain his privacy and for reasons of security. For this case, the discussion was written down in field notes during and after the interview session. The main reason for recording the interviews was to preserve the accuracy of the informant's words. These words were then used as direct quotations from the interview transcripts in various part of the thesis. The advantage of the recorded interview was identified by Bell (2006: 164):

> Tape-recording can be useful to check the wording of any statement you might wish to quote, to allow you keep eye contact with your interviews, to help you look interested – and to make sure that what you write is accurate...to identify categories...summarize and to note particular comments which are of particular interest without having to try to write them down during the course of the interview.

Apart from the one-to-one interviews, group interviews were conducted with port workers of Northport and Westport of Port Klang, whose opinions and experiences important in view of their involvement in port security. A group interview is defined as "a group conversation with a purpose" (Maykut and Morehouse, 2000: 104). The approach allows for bringing several different perspectives into contact and used for eliciting information for researcher's focus of inquiry (Maykut and Morehouse, 2000: 103). Ideally this type of interview can be conducted with a maximum of six people to obtain a fair range of opinions and experiences (Maykut and Morehouse, 2000: 104).

Following this guidance, I restricted the numbers to five and six members in each group. The session was held at a separate date and time because of the different location of the terminals.

Although it would have been helpful to conduct more group interview sessions representing port workers of Port Klang, the research had to be limited in this way due to restrictions imposed by the port management in releasing the workers from their duties as it might disrupt the port operations. For a port, efficiency and productivity are among the key components in shaping commercial viability. For this, port workers play a crucial role. I could not therefore demand more workers to be released from their duties to accommodate my research needs. Hence, the restriction imposed a limitation to my study in gathering more views from the port worker perspective of port security measures and how these affected their performance.

However for the purpose of gathering valid data, I requested the management to provide long service workers from different segments of the operation based on Denscombe's (2008: 177) suggestion that "under certain circumstances researchers can deliberately select participants who are very different in order to gather widely differing views and experiences on the topic of the interview". This provided a good representation of workers with diverse background. Their views were considered sufficient to reflect the views of the majority of port workers. This was verified during the interview with a question concerning their co-workers' opinion. They all agreed that their co-workers have the same opinion as theirs.

In all cases, whether one-to-one or group, interviews were semi-structured.

> With the semi-structured interview the interviewer is prepared to be flexible in terms of the order in which the topics are considered, and, perhaps more significantly, to let the interviewee develop ideas and speak more widely on the issues raised by the researcher. The answers are open-ended, and there is more emphasis on the interviewee elaborating points of interest (Denscombe, 2008: 176).

Based on this flexibility, interviewees were encouraged to give a free flow of thought in response to questions. Moreover, additional questions, not prepared in the list, were also asked. In certain cases, the designed method was effectively changed from the "semi" to "un-structured" because allowing the interviewee "to use their words and

develop their own thoughts...is a better way of discovering things about complex issues" (Denscombe, 2008: 176). The reason for raising unstructured questions in many instances was because the informant's points intrigued me and made me interested to know more details. Thus, further explanations were sought, using such questions as "why' 'what' and 'how' as suggested by Yin (1994). The free flow of thought from the interviewees particularly, enabled me to elicit more information on the implementation and implications of port security policies.

2.4.1.6 **Informal discussions**

The interview process did not stop at the organised and official meetings. In order to gather additional information, informal discussions were held with other governmental and non-governmental officials, beyond the list of participating informants. The selection of this type of person was casual as some of them were already familiar to me. On many occasions we had discussions in their office premises about issues concerning my research. To some extent the discussions helped to verify the information collected from the selected interviewees. However in no circumstances was the collected data/information from the selected informants revealed or shared, either intentionally or unintentionally, to non-participating informants during the course of informal discussion.

2.4.2 **Secondary research**

2.4.2.1 **Data collection**

Secondary data which include both raw data and published summaries are data collected by individuals or organisations other than the researcher, are regarded as a core component supplementing the primary data in most social science research (Saunders, Lewis and Thornhill, 2009: 256). In a case study approach, integrating primary and secondary data helps to substantiate the findings. Mixing both these type of data forms a solid basis for improved accuracy and complements information from other sources (Denscombe, 2008: 139). Considering this importance, due attention was given to secondary data. According to Saunders, Lewis and Thornhill (2009: 258-259) there is a variety of secondary data. For this research, port security rules, regulation, Acts of Parliament, policy papers, official statistics, standard operating

procedures of ports, slide presentations, published and unpublished materials from the identified agencies and so on formed the main source of the information for analysis.

Reliable web-based information is another source of secondary data. Since most agencies and organisations commonly published their information through web sites, Saunders, Lewis and Thornhill (2009: 263-267) affirm that this media provides a wealth of secondary data, with numerous organisations around the world updating their information regularly. On this basis, statistics and various sources of information have been tapped quite often from related web sites, for instance from the IMO, MOT and Port Klang Authority.

Both types of data, the interview results and the secondary data described above, are primary sources.

Secondary sources are mainly books, refereed academic journals, periodicals, serials, magazines and newspapers (Lewis and Thornhill, 2009: 69-73). The research made use of a range of secondary sources. Not just confined to books, it also referred to a large number of articles in scholarly journals, some available on-line as well as newspapers and magazines. These sources were used extensively throughout the thesis.

2.5 **Reliability and Validity**

In any qualitative or quantitative research, the issue of bias is a matter that demands attention, because sampling bias or researcher bias may affect the reliability and validity of data. Scholars like Mason (1997), Silverman (2005a) and Denscombe (2008), argue that the question of reliability and validity can be handled methodologically by taking certain precautions to reduce the degree of bias.

According to Silverman (2005b: 225) reliability refers to "the degree of consistency with which instances are assigned to the same category by different observers or by same observer on different occasions". In other words, the same results should be produced on different occasions with the same methods or research instrument (Denscombe, 2008: 296). As noted earlier, although this research was not used to generalise the finding to other ports, considerable attention was given in interviews to encouraging a sincere response from the informants to the questions asked.

Nonetheless Silverman (2007: 13) contends that 'authenticity' is rather more imperative than reliability in qualitative research. He observes that the aim is usually to gather an authentic understanding of people's experiences. For this, the open-ended question is an effective method of generating a good source of data. This research approached the same principle as suggested by Silverman (2007) by using the semi-structured as well as open ended questions in interviews.

Validity refers to "…truth: interpreted as the extent to which an account accurately represents the social phenomena to which it refers" (Silverman, 2007: 232). Densncome, (2008: 335) describes succinctly the "idea of validity hinges around the extent to which research data and the methods for obtaining the data are deemed accurate, honest and on target". To establish validity for this research, as Denscombe (2008: 201) suggested, the data collected for this study was verified through information obtained from other sources particularly the documentary evidence, informal discussions and observations. These were then cross-checked with interview data. Consequently this would form a level of consistency with secondary data.

On the note of bias, as far as this research is concerned, I was fully aware that despite the efforts already described to ensure that the informants distinguished my role as an academic researcher from my previous position as a government official, there could still remain a certain prejudice against sharing relevant issues. Further, there was always a related risk, considering my good access to port and other organisations that informants might feel obligated to comply with my research and not respond to questions frankly. Keeping this awareness firmly in mind, I tried as much as possible to avoid such prejudices by being objective and took care to maintain the impression of impartiality in the whole process of my fieldwork.

2.6 **Data analysis**

Essentially all recorded interviews were transcribed as suggested by Bell (2006: 164 – 165). This process was initiated during and after the field trip. Each transcript text was then given a code to preserve the anonymity of interviewees. As Denscombe (2008: 2002) proposed, key themes were drawn from each transcript based on the interview questions and interpretation. According to him:

> A recurrent theme in interviews indicates that the idea/issue is something which is shared among a wider group, and therefore the researcher can refer to it with rather more confidence than any idea/issue which stems from the words of one individual.

Further, such method allowed for discovering things from the data which is the main logic of analysing qualitative data (Denscombe, 2008: 288). Since the number of informants was only 30, identifying key themes from the text was done manually by reading it meticulously over several times. By doing so, I was able to extract the relevant themes and discovered logical things that were implanted in informants sharing. Some examples of identified themes are; "security awareness", "loopholes in security", "sovereignty", "cost", "government problem in implementing the ISPS Code" and so on. These themes were subsequently categorised in a tabular form and all related quotations were extracted and placed accordingly as advised by Silverman (2007: 163) and Denscombe (2008: 288).

As Silverman (2007: 163), points out "…reporting qualitative data, is often described as a 'thematic analysis' and may be presented with the quotations integrated into the text…", along to this suggestion, the study translated the relevant themes into different sub-headings in the thesis and deliberated further. Those arguments were then supported with direct quotations and supplemented with other relevant sources. This has strengthened the overall discussion of issues concerned.

Since English and Malay languages were used during the interviews, the Malay spoken words were translated into English in the written transcript accordingly. As I have a good command of spoken and written Malay language, translating Malay to English was not an issue. However, the English grammar of informants' responses was not corrected in order to maintain their views and experiences in as "pure, basic and raw" a form as discussed earlier.

2.7 **Conclusion**

The overall objective of this chapter is to explain the methodological approach adopted for this study. A qualitative strategy was used involving gathering primary data through interviews though secondary data has also been important. The research philosophy for qualitative study dictates that this type of study requires interpretation from the words expressed by the respondents, thus considerable attention was paid in

analysing and eliciting information from the interview data as will show in later chapters. In many cases the interview results were cross-checked with the information obtained from informal discussions, direct observations and published and unpublished material and subsequently incorporated in the relevant chapters.

As already noted, the research encountered some practical problem due to the sensitive nature of the subject matter. The interruptions encountered during the process of interview caused missing points in the midst of conversation as there was disruption in getting a free flow of thoughts from interviewees. This has impacted on obtaining a continuous explanation from one issue to another. Logistical problems restricted visits to other Federal ports.

However the most significant challenge was the subject that is being investigated. Port security is a sensitive issue and it has not been openly discussed. The support of the MOT for my research, referred to above, as also my professional background, undoubtedly facilitated my access to port facilities and the willingness of people to be interviewed. At the same time certain informants, governmental and private, proved cautious in sharing certain security issues as they were aware that my thesis would become a public document later. This appeared quite obvious during sessions with port terminal officials, in relation to security implementation and provision of the related documents. Ironically, a factor here may have been that I was no longer considered a government representative, but an 'outsider'. As private entities running their operations on commercial basis, sharing information does not come easily to such stakeholders. As a result, there was some restriction and selectivity in giving me access to certain material, though overall this was minimal. Overall, the research approach proved suited to answering the questions posed in this study, providing a fair amount of knowledge on the subject being investigated.

As the study attempted an exploratory approach where the method requires discovering, understanding and describing new issues, the following chapter takes us to the understanding of various concepts of port, security and its interrelated issues as also the scenario of pre-9/11 security regimes.

CHAPTER THREE

PORT SECURITY: CONCEPTS AND ISSUES

3.1 Introduction

The dividing line established by 9/11 as "before" and "after" in the maritime world as explained in Chapter One, has led to significantly increased attention to the study of maritime security, particularly port security, which is a complex and subjective subject due to its interconnection with international relations and policy decisions as well as practices at different levels. It not only deals with a host of crimes that affect ports locally but also with the emerging dangers with repercussions to trade and economy both domestically and internationally. There is persistent debate among scholars in arriving at a precise definition of interrelated concepts that come along with this type of study, such as 'port', 'maritime terrorism' and 'security' (Bateman, 2006: 78; Banlaoi, 2009:59; Ng, Girish and Gujar, 2008: 257 and Hong and Ng, 2010: 52). In order to gain a better understanding, it is appropriate to establish a clear explanation of some of the relevant concepts related to this study. This takes up the first part of this chapter. Subsequently, the chapter explains the introduction of various measures at different spatial levels as a way of protecting the maritime sector from the identified threats before 9/11. As such, the whole chapter attempts to provide a holistic view of issues related to port, trade, port security and its practices.

3.2 Definition of a port

In contemporary maritime sector, port-related issues have drawn sizeable attention as they are considered an integral part of the total transportation system. The importance of ports in providing services and acting as critical nodal points (Meersman, 2009: 2) in facilitating trade between land and sea, by handling at the end of the 20th century not less than 82% of world trade measured in tons through shipping cannot be overemphasised as a factor in national economic growth (Stevens,1999: 46). Through a port's activity, a nation builds its economic strength by engaging in ocean trade and establishes economic connectivity with other nations and hence a close bond and interdependency is established. Thus, the efficient functioning of a port, with an uninterrupted flow of traffic, becomes the concern of many players within the maritime industry, as also for the state.

According to Hoyle and Hilling (1970: 227) there is a close relationship between port and economic development. This is applicable to both developed and developing nations. While the developed nations like the US and many European economies had claimed a big portion of maritime trade for many centuries (Wergeland, 1996: 160) equally the developing economies are firmly oriented towards the overseas market rather than overland trade. Hoyle and Hilling (1970) argue that because of over dependency upon overseas trade, the capacity of a seaport directly affects the country's economic growth by permitting or hindering the commodity flow. At the same time, it can be argued that while ports do influence economic development, ports are also in their turn influenced by economic development (Beth, 1978: 15). Holding to this connectivity, Hoyle and Hilling (1970: 227) believe that ports do not grow in isolation. They respond according to the changing opportunities and demands at different times over different areas on different scales and with different intensities, taking into account the fact that each port is designed and developed according to the need where it is located. This situation is more observable in developing countries, for example on the African and Asia continents (Hoyle and Hilling, 1970: 227; Lee, Song and Ducruet 2008). This connection therefore raises a question, what constitutes a port?

Generally, a port is broadly defined as "a land area with maritime and hinterland access that has developed into a logistics and industrial centre, playing an important role in global industrial and logistics networks" (Van der Lugt and De Langen, 2007: 2). In traditional understanding, a port is known as a safe haven and ship/shore or maritime intermodal interface (Alderton, 1999: 2). It also been regarded as the land/sea interface in facilitating water-borne trade in domestic commerce between cities, and international commerce between countries (Fear,1992: 139). The word 'interface' explains the concept of a meeting point between different modes of transport. Therefore, there is a need to provide facilities and services required for transferring cargoes onto land carriage and vice versa and onto other ship for transhipment purpose (Baudelaire, 1986: 31). In this regard, a port is not just functioning to accommodate ships and other types of water transport but also acts to provide the capacity for a continuous flow of cargo between land and water as well as to water-to-water transport modes (Frankel, 1987: 7). As such any interruption of this cargo flow therefore has an impact beyond the port itself.

Reflecting a general understanding of a port, the term ‘port’ in fact has been defined and categorised in various ways in different parts of the world based on its purpose, function and contribution. It then goes beyond this immediate interface characteristic. In a macro-analytical approach which covers geographical, physical and corporate assets, ‘port’ refers to waterway connections – relates to sea, lake, river, inland waterways and/or canal locations. The term can also cover a dry and inland port with no waterway access but connected through multimodal or intermodal means. Its functions centred of urban development, industrial activity, life activity bases and maritime leisure bases. In micro-perspective approach, a port is regarded as a place for providing facilities where vessel maintenance and cargo/passenger transfer is ensured. Its services are divided into ship-related, cargo-related and crew/human related (Bichou and Gray, 2005).

This host of activities and other unforeseen circumstances actually stemmed from the process of port evolution over time when ports tended to retreat from their old city centre sites to new ‘out of town” locations because of advancement in technology, modernisation and changes in role (Alderton, 1999: 121). Considering a port’s involvement in various activities and evolution over time, the United Nations Conference on Trade and Development (UNCTAD) has framed this development into four different ‘generations’. The divisions are; First generation (before 1960s), Second generation (after 1960s), Third generation (after 1980s) and Fourth generation (since 2000) (Beresford, et al, 2004: 95-96). However, Beresford et al (2004: 96- 99) argued that this type of discrete ‘port generations’ is not practical and cannot accurately reflect the port industry on a global basis. They instead proposed the WORKPORT model due to many variations and uniqueness of the port especially ports in Europe where their developments are greatly influenced by working culture, health and safety and environmental issues overlooked in the UNCTAD model. The fundamental issue however, in whatever ways ports evolved over time as described in different models, the latest developments suggest that a port has been transformed from being a gateway to a logistics hub where it becomes a vital part of the supply chain management (Pettit and Beresford, 2009). For this study, this is where the port becomes critically important, since security of the transportation system is a core component of this development.

On the seaward side the shipping that interfaces with the port also needs to be seen together with port development. The revolution of the shipping industry that went hand-in-hand with port modernisation in the 20th century with high levels of automation, advanced communications systems and changes in cargo handling greatly influenced the reorganisation of the overall port system (Hayuth and Hillling, 1992: 56). The changing technology influenced almost every port in the 20th century. Since the Second World War, palletisation was one method developed in port innovation by using the fork-lift truck. However, the container revolution in 1966 was the watershed for port design and also brought a tremendous change in ship sizes in terms of carrying capacity of containers. In fact, the progressive growth of container vessels was segmented in different 'generations' based on carrying capacity. Containerisation of mostly high value cargoes prompted the international container trade to escalate at a rate far exceeding that of maritime trade as a whole (ESCAP, 2007 (a): 4-9). According to the Economic and Social Commission for Asia and Pacific (ESCAP), during the 1980s the maritime trade growth with an average of 7.8% was largely attributed to the increased importance of container usage. As a result of this, shippers increasingly realised the importance of shipping in containers. Consequently goods that had previously been shipped as loose cargoes gradually converted to containers (ESCAP, 2007 (b): 4) and more ports developed the infrastructure and acquired the handling equipment needed to cater for container vessels. Although a port is designed in various shapes and sizes and differs in every geographical area according to the design and environment, it appears that the advent of containerisation brought greater standardisation or similarity in the provision of facilities for handling trade in most international ports.

It must be concluded that port development, and indeed globalisation itself, in the modern period cannot be treated in isolation because the changes in the port and shipping sector which have been described go hand-in-hand.

3.3 **Ports in trade facilitation and modernisation**

Before analysing the issue of 'security', it is appropriate to get an understanding of a port's role in trade facilitation and its changes towards modernisation.

The changes that occurred within shipping and ports over the last decade have brought a significant transformation of the world economy at large. One fundamental contributing factor was the increased reliance on international trade as the primary engine for economic growth and development as briefly stated above. Practical examples are evidenced in many economies especially the fast growing Asian giants such as China and India. Being self sufficient in the past and protecting the domestic market, they then opened their doors to integrate within the global economy (ESCAP, 2009) in which UNCTAD (2004: 4) aptly describes this as "new geography of trade". Malaysia in the category of a developing country is no exception to this transformation.

According to the ESCAP, there was a fluctuation in the growth rate of trade and world economy from post World War Two up to 1980s. However from 1990s a major change occurred in which the value of trade grew around 2.5 times faster than the rate of world economy. The increased pace of industrialisation in the Asian countries resulted in increased production of manufactured products which were then sold to markets in the West. The main trade growth was supported by the increasing number of ocean going vessels. According to Stopford (2003: 254) a country's pattern of sea trade depends upon three variables: Gross National Product, stage of development and natural resources. He concludes that the character of trade changes as a country develops. As such, one could observe that as its ports face progression according to the country's development, the need for and pattern of trade follows subsequently.

The fast growing developing nations especially the Asian countries like China, India, Singapore and Malaysia are good examples of high economic growth. By 2004 their remarkable growth had placed six of the world's top twenty-five ports in Southeast Asia (SEA) and fifteen of the top twenty-five ports in East Asia (Shie, 2004: 27). In Malaysia's case, the country's premier port of Port Klang was placed in the same league. Its impressive progress in terms of container traffic is reflected in its position as the fastest developing port in SEA but also placed the country in the fifth highest

position amongst the seventy six developing economies after China, Singapore, Hong Kong and South Korea from 2007 to 2010 for the same container traffic growth (UNCTAD, 2010: 95-96 and UNCTAD, 2011: 87-88). In global ranking, UNCTAD (2011) placed the Port Klang in thirteen position of the top twenty world container terminals based on its performance in three consecutive years as shown in Table 3.1. This development has been associated with a significant improvement in the port's ability to facilitate the growing trade.

Table 3.1: Top 20 Container Terminals and Their Throughput in TEUs (2008, 2009 and 2010)

Port name	2008	2009	Preliminary figures for 2010
Shanghai	27,980,000	25,022,000	29,069,000
Singapore	29,918,200	25,866,400	28,430,800
Hong Kong	24,494,229	21,040,096	23,532,000
Shenzhen	21,413,888	18,250,100	22,509,700
Busan	13,452,786	11,954,861	14,157,291
Ningbo	11,226,000	10,502,800	13,144,000
Guangzhou	11,001,300	11,190,000	12,550,000
Qingdao	10,320,000	10,260,000	12,012,000
Dubai	11,827,299	11,124,082	11,600,000
Rotterdam	10,800,000	9,743,290	11,145,804
Tianjin	8,500,000	8,700,000	10,080,000
Kaohsiung	9,676,554	8,581,273	9,181,211
Port Klang	7,973,579	7,309,779	8,870,000
Antwerp	8,662,891	7,309,639	8,468,475
Hamburg	9,737,000	7,007,704	7,900,000
Los Angeles	7,849,985	6,748,994	7,831,902
Tanjung Pelepas	5,600,000	6,000,000	6,530,000
Long Beach	6,487,816	5,067,597	6,263,399
Xiamen	5,034,600	4,680,355	5,820,000
New York/ New Jersey	5,265,053	4,561,831	5,292,020
Total top 20	**247,221,180**	**220,900,801**	**254,387,602**

Source: UNCTAD, 2011: 89

Table 3.2 indicates a progressive trend in global maritime trade in which shipping and hence ports play a fundamental role.

Table 3.2: Growth of World Merchandise Export by Selected Region in Percentage (1998-2006)

Category/Region	1998	1999	2000	2001	2002	2003	2004	2005	2006
World	4.7	4.7	10.4	-0.6	3.4	4.8	9.5	6.0	8.0
North America	4.6	6.9	9.6	-5.0	-2.7	1.1	8.0	6.0	8.5
South & Central America	9.0	-0.4	4.4	5.0	1.9	6.0	13.0	8.5	2.0
Europe	5.5	3.3	9.3	2.4	1.9	1.8	7.0	3.5	7.5
Commonwealth of Independent States	0.9	-8.8	11.8	4.5	8.7	12.8	13.0	4.5	3.0
Asia	3.8	7.3	14.2	-3.4	11.2	11.4	14.5	10.0	13.5

Source: ESCAP, 2007(a): 4

The table highlights the fact that Asian trade as a whole was progressing more steadily and contributing a significant percentage of merchandise export as compared to other regions of the world. The high composition and direction of Asian trade could be attributed to its intense initiative in changing towards port modernisation and containerisation. Countries like China, Singapore and Malaysia are the good examples under this category. According to Lee, Song and Ducruet (2008: 381) the strong growth of Asian trade created a high demand for container transportation and therefore considerable attention was given to developing port infrastructure. In this respect they observed one common aspect: the facilities were built towards outer areas from cities due to lack of land capacity.

Generally, the progressive trend in trade and technological advancement became among the contributing factors to port privatisation in the 1980s and 1990s. Apart from the United Kingdom (UK), this was most clearly evidenced in the ports of developing nations, especially in Asia. They were most concerned with port reformation through privatisation and other forms of modernisation. A number of studies in relation to this can be noted, including Song (2007), Ryoo and Hur (2007), Inamura, Shibasaki and Ishiguro (2007), Wong (2007), Tongzon (2007) and Leong (2007). These studies emphasised that the container revolution, boosted by the rapid growth of Asian trade, modernised the ports in Asia in a short span of time.

Improving port efficiency in the national interest was commonly given as the major reason for privatisation. The international trend towards privatisation of ports (Frankel, 1987: 339, Baird, 2002: 279 and Hill, Scrase and Wells, 2008: 98) did not

remove this government interest in having a strong modernised port system. The efficient functioning of a port was not a matter simply of interest to port owners, port operators and port users. It had an impact on the wider local and national economy and therefore continued to be of concern to government. However the transfer of port ownership, and/or management, to the private sector did make it more difficult for governments to influence what went on in ports after this, with implications also for ensuring compliance with international security measures.

3.4 What is considered 'security'?

Having said that the importance of port in national economic development through trade facilitation is unquestionable, the significance of port security cannot be underestimated. It will be shown in the next chapter how security in fact has become one of the pressing issues for the port administrators and policy makers after 9/11 even to the extent the word 'security' has been projected in an entirely different dimension. As Khalid (2005: 1) points out "the aftermath of 9-11 has involuntarily shifted the term "security" into a new, more complex and more dangerous dimensions". In fact, the concept 'security' is a complicated matter. In the course of debate among different parties, diverse interpretations were presented in most circumstances. However, four fundamental questions could be addressed within this concept. Namely, (i) who or what is to be secured (what is the object of security), (ii) who or what constitutes a threat to security (what is the source of security threats), (iii) who or what is responsible for the provision of or maintenance of security (who is the guarantor of security (iv) what is the best security policy? (Adamson and Grossman, 2004: 1). These are some of the issues considered in deliberating port security of this study.

3.4.1 Difference between safety and security

Often the terms 'safety' and 'security' are conflated and seen as the same by the general public. Although these two words may be seen as synonymous, in the maritime sector however, they carry different meanings. Basically, 'safety' is defined as "reducing the risk or occurrence of loss, injury or death which will be occurred [sic] because of some accidental events or natural causes like natural disasters, while 'security' as "reducing the risk or occurrence of loss, injury or death which will be occurred [sic] because of deliberate or intentional actions" (Mazaheri, 2008: 5).

But in a seaport environment as Kuo (2007) notes, safety not only involves a wider spectrum of incidents caused by either natural or human disaster but also includes disasters caused by hazardous cargo, complex technology, and many climatic and geological happenings. These may result in explosions, fires, earthquakes, hurricanes, flooding, and structural failure. In a broader spectrum of maritime safety, IMO extends this to "preventing or minimizing the occurrence of accidents at sea that may be caused by sub-standard ships, unqualified crew or operator error (Klein, Mossop and Rothwell, 2010: 6).

On the other hand, the general term of 'security' is "most commonly associated with the alleviation of threats to cherished values; especially those which, if left unchecked, threaten the survival of a particular referent object in the near future" (Williams, 2008: 5). In parallel to this, Tschirgi (2007: xv) refers security "to a state of mind, a "feeling," if you will, of comfort, of certainty that no imminent threat to that same feeling of comfort is on—or lurking just below—the horizon".

However, according to Klein, Mossop and Rothwell (2010: 6) there is no precise definition of the term 'security' from a maritime perspective with reference to the United Nations Convention for the Law of the Sea (UNCLOS), occasionally described as the 'constitution of the ocean'. They pointed out that the United Nations Secretary-General acknowledged the absence of an agreed definition of 'maritime security' but highlighted seven specific threats to maritime security in his 2008 Report. These are: (i) piracy and armed robbery against ship, (ii) terrorist acts, (iii) illicit trafficking in arms and weapons of mass destruction (WMD), (iv) illicit trafficking in narcotic drugs and psychotropic substances, (v) smuggling and trafficking of person by sea, (vi) illegal, unreported and unregulated fishing and (viii) intentional and unlawful damage to the marine environment (ibid).

To create a workable definition appears to be even more complex at regional level. At the Asia-Pacific region, maritime security is considered in the perspective of "traditional power rivalries between nation states, control of trunk shipping routes, to contemporary economic and social issues e.g., environmental degradation, weapon proliferation, drug and human smuggling, etc" (Ng and Gujar, 2008: 269).

With reference to SEA, Banlaoi (2005: 59) claims:

> It is not easy to come to grips with the issue of maritime security in Southeast Asia because the term maritime security encompasses such a broad concept that a panoply of notions like maritime safety, port security, freedom of navigation, security of the sea lines of communications (SLOCs), security from piracy attacks, including armed robberies against ships, and security from maritime terrorism can be included as part of the concept of maritime security. In fact although many experts have spoken on the topic of maritime security there is still an absence of a commonly accepted definition that will form the basis for regional cooperation.

Despite the shortcoming of a clear definition, Hawkes (1996: 174) has sought to define maritime security as "those measures employed by owners, operators, and administrators of vessels, port facilities, offshore installations, and other marine organizations or establishments to protect against seizure, sabotage, piracy, annoyance, or surprise. It can also be considered as embracing all measures taken to prevent hostile interference with lawful operations". Correspondingly, Klein, Mossop and Rothwell (2010: 8) consider maritime security as "the protection of a state's land and maritime territory, infrastructure, economy, environment and society from certain harmful acts occurring at, or from the, sea". In this connection, Pallis and Vaggelas (2007: 1) simplified maritime security as "the resistance to an intentional, unauthorised act designed to cause harm or damage to ships and ports".

It seems therefore that the best distinction between safety and security is that 'security' refers to protection from intentional acts while 'safety' from accidental events (Pallis and Vaggelas., 2007: 1). In the case of safety, accidents that happen from unwanted and unintentional events can be analysed from the past record and anticipate future incidents, whereas in security, the unwanted events due to intentional motives cannot be analysed from the past record for the future prediction as the characteristics of events may be very different (Bichou, Bell and Evans, 2007: vi). With regards to events threatening security of maritime sector, Melendez (2004: 13-14) expanded into 'locally restricted' and 'locally unrestricted', although their borders are sometimes ambiguous and overlap with each other. 'Locally restricted' includes cargo theft, drug smuggling, stowaways and illegal immigrants, piracy and armed robbery and sabotage. These types of issues are perceived to follow a certain pattern and can be assessed statistically. On the contrary, a 'locally unrestricted' issue is

international terrorism. This type of conduct is difficult to predict and seldom follows any specific pattern.

Despite the suggestion that the motives 'intentional' and 'unintentional' determine the characteristics of both 'safety' and 'security', Mejia (2002), however makes the criticism that there is no clear understanding of these two terminologies even in the IMO conventions. He argues that the IMO never defines precisely the definition of the word *safety* in the ISM Code and *security* in the ISPS Code. Even with the absence of this definition, Mejia (2005: 2) however agrees with Pallis and Vaggelas (2007) that 'safety' is "protection against events that are unintended (read accidents) while security deals with intentional acts carried out by persons who undertake malicious acts with forethought and planning in order to promote their own goals, whether ideological, political, or religious."

Notwithstanding this dualism, Yasin (2007: 25) however affirmed that both 'security' and 'safety' is mutually interlinked. He argues that in any tested case, security of vessels would cause navigational hazard to other transiting vessels and the ensuing environmental damage would affect the safety aspect. Conversely, any serious accident would destroy the eco system and hence ruin the livelihoods of coastal inhabitants. This would eventually force them to resort to maritime crime for survival which reciprocally poses security threat to users.

However for the purpose of this study, the intentional act that affects the security of a port and its causes will be the main focus. Therefore, it is appropriate to analyse what constitutes 'port security'. The following section discusses this from a different perspective.

3.5 **The scope of port security**

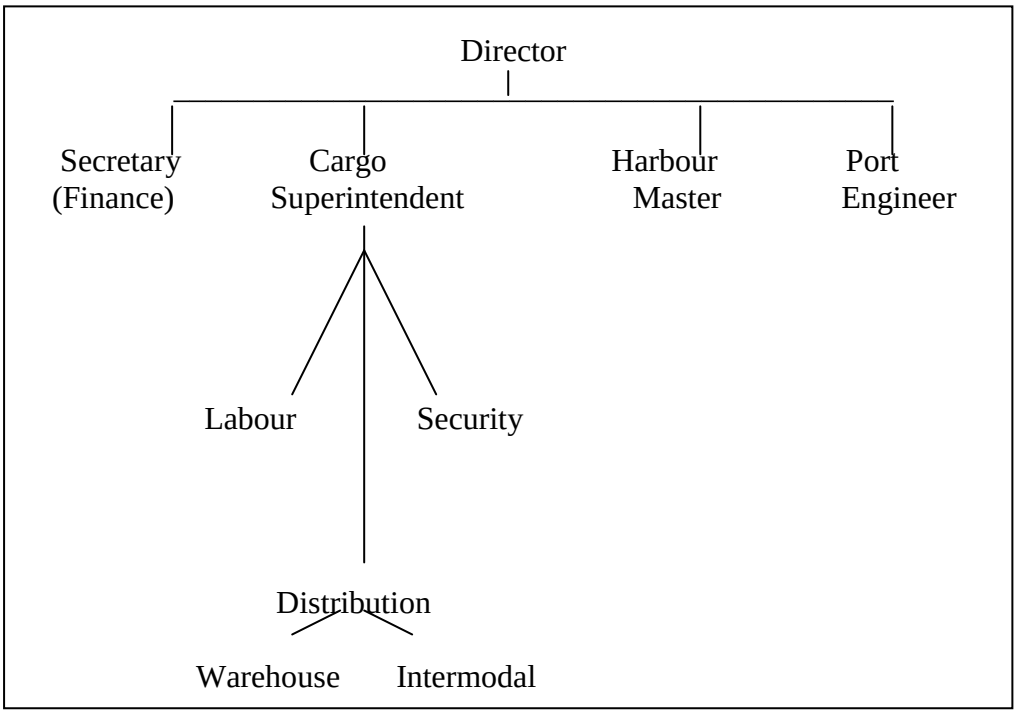
In spite of the complexity and subjective nature of maritime security's meaning, in which 'port security' becomes a part of this broader concept as asserted by Banlaoi (2005: 59) above, Talas and Menachof (2011: 3) however, briefly define port security as "the absence of and/or the perception of the absence of threat to port facility assets, cargoes and the ship-port interface from unauthorised acts". This section attempts to analyse the issue of port security from various ankles that covers within the scope of this study.

The scope of port security can be seen in various dimensions. It covers both internal and external directed measures. Within these two measures, it takes into consideration of traditional way of safeguarding the port from many types of threats and later incorporating terrorism and piracy that are more recent and intimidating.

3.5.1 **Internal security**

In the past, security practice was traditionally a small component of port administration/operation. The main security function was to safeguard the cargo as Alderton demonstrates in his 1984 basic port administration model shown in Figure 3.1. This probably can relate to Ellen's (1993: 13) assertion that "ports are the veritable treasure houses of the nation and, since time immemorial, they have suffered from theft and pilferage."

Figure 3.1: Port Administration



Source: Alderton, 1984: 186

Figure 3.1 demonstrates that traditionally the component of internal port security was about safeguarding and not damaging the property of customers using the port (the ships and cargoes). Therefore, the Cargo Superintendent who was responsible for the welfare of the port labours also took full charge of managing and maintaining the required security of the port cargoes. This means that cargoes on the quayside, for

example, had to be protected against the elements either theft or accident. Along this, those handling the cargoes (port workers) had to do so with skill. Manual handling of break-bulk cargoes was necessarily associated with risk of accidental damage in which the safety aspect went in parallel with security.

Thus there was a combination of safety and security element in internal security measures. When a port places some form of safety features to circumvent human accidents, engineering works and operations, it is therefore considered secure and free from disaster caused by human and natural factors (Kuo, 2007). As such, traditionally prevention of accidents and cargo security were the central focus of ways to make ports secure. In this connection, Alderton (2005: 105) argues that port security is just a sub-set of safety, where the perceived risk is seen to arise from person or person with criminal or malevolent intentions. In another dimension, Ellen (1993: 4) suggests port security more relates to 'security risk' by referring to:

> Any potential condition, having its basis in crime or other deviant behaviour, which, if it were to become a fact, would adversely affect efficiency.

For Gomez (1996: 13) internal port security was a combination of both physical security and safety (industrial security). He explained that the security function was to protect life and property within the port boundary. In other words, the main attention was about preventing theft while goods are in the port. The measures taken to achieve this could be through different "circular barriers", consisting of natural barriers such as rivers, oceans, mountains or mad-made barriers like walls, fences and lighting. The other barriers might be electronic devices such as closed circuit TV systems and animal barriers (dogs) as well as human barriers (security guards).

With the advent of containerisation in the 1960s that prompted for mass movement of high value goods, cargo theft appeared to be a continuing problem. Custar (2008: 280) rightly points out that "fighting cargo theft is as old as the process of cargo transportation". Normally cargo theft provides a major source of revenue for organised crime. To mitigate such type of menace in the port and enhance security, The State of California and Florida in the US for example, where cargo theft was most endemic, had taken the matter seriously and defined this act firmly in their penal

codes.[2] In a nationwide measure, the US Department of Transportation established a voluntary organisation, the National Cargo Security Council, in 1982 to develop educational programmes and coordinated with private industries to deter theft incidence (Custar, 2008: 279-282).

Modern port technology is no longer as labour intensive as it used to be. Data from the Port of New York/New Jersey for instance shows that employment for port workers dropped from 30,000 in 1970 to 7,400 in 1986 (Bonacich and Wilson, 2008: 177). Normally the downsizing of workers was carried out during the process of port restructuring in an effort to increase port performance and productivity. This situation was highly visible when many ports around the globe were privatised (Baird, 2002: 279).

Although the reduction of labour force was meant to enhance efficiency and hence might have been expected to reduce the crime rates because of less direct human involvement, in handling cargoes, this did not prove to be the case. The crime continued to happen in many different ways through various loop holes. Lack of port workers meant that the criminals were able to steal boxes unobserved and undetected. In fact a 1993 study in the US revealed that about 83% of crime within the port area was committed by those who had the right to be inside or were employees (Ellen 1993:14-72) although the number of employees was not high. The same goes for the global level where the OECD (2003: 9) claimed that cargo theft was some form of internal conspiracy that enabled thieves to correctly identify and target containers of high value goods assisted by individuals legitimately employed in seaports or transport industry.

In modern container ports, security seals on container doors are sometimes not checked due to lack of staff. For example in the US ports before 9/11, only about 2% of containers were physically checked (Harrald, Stephens and vanDrop, 2004). In terms of thefts and pilferages of containerised cargo in the U.S ports, the loss has been estimated in the range of USD15 billion annually. At the global level, the same crime

[2] The California Penal Code 487h(b) defines "cargo" as "any goods, wares, products, or manufactured merchandise that has been loaded into a trailer, railcar, or cargo container, awaiting or in transit" and establishes a link between "cargo" and the act if taking it criminally" (Custar, 2008: 279).

is estimated about 5% and incur a loss at least USD50 billion to the cargo owners annually (Custar, 2008: 284-285).

3.5.2 **External security**

External port security is about preventing unauthorised entry of people into the port to commit theft/armed robbery/acts of piracy. This also includes preventing unauthorised transit through the port of goods or illegal substances (smuggling) or people (illegal immigration/stowaways). It seems that although the container revolution effectively eased the movement of high value cargoes, it also provides a good opportunity to use containers for various illicit purposes such as transporting stowaways, contraband, drugs and small weapons.[3] In some cases stowaways are considered to be acting as courier for the drug cartels (Barnes and Murray, 1996: 151).

In this connection, some of the "circular barriers" suggested by Gomez (1996) above provide a good means of protection. However, some ports are more physically vulnerable than others as a consequence of geographic size, generally open accessibility by water and land, location in areas of dense population and connection to other transportation link. In this regard Frittelli (2006: 94) rightly points out that "compared to commercial airports, seaports are generally diverse in terms of their physical infrastructure and operations. As a result of this diversity in characteristics each ship and port facility presents different risks and vulnerabilities". The need to strengthen the port's ability to resist such external threats, has led to policing of the waterfront.

There is in fact nothing particularly new to the 20th or 21st centuries in the principle of guarding port facilities. For example, this was noticeable even in the 18th century where port security in many parts of the world was carried out by guard forces who were soldiers armed with muskets to safeguard the storage and warehouse facilities. To further improve the measure, the waterfront area tended to take on a fortress

[3] The word stowaway is a traditional maritime word used to describe unauthorised passenger on a ship. This includes refugees, illegal immigrants, economic refugees, economic asylum-seekers and political asylum-seekers. A stowaway is also termed as criminal. He is travelling without payment or in contravention of a national law (Parritt, 1992: 2). IMO in its Resolution A.871 (20), "Guidelines on the allocation of responsibilities to seek the successful resolution of stowaway cases", defines stowaway as "a person who is secreted on a ship, or in cargo which is subsequently loaded on the ship, without the consent of the shipowner or the master or any other responsible person, and who is detected on board after the ship has departed from a port and reported as a stowaway by the master to the appropriate authorities" (IMO, 2009a).

character (Palmer, 1990: 103). In Britain's Port of London, the Marine Police was set up during this period as first formal police force to safeguard the port (Ellen, 1993: 50).

It is apparent that most of the traditional aspects of security, internal and external, discussed above remained relevant to port security in the early 21st century, though there was a widening scope of security concerns beyond the immediate port area. The perceived scale of threat and level of organisation of threat altered in the later 20th century, with organised crime seen to require different responses, at different levels (local, national, international) to those in the past.

Two other threats, piracy/armed robbery and maritime terrorism, were perceived to pose greater challenges during this era and hence extended the scope of port security. The following discussion brings us to these two menaces.

3.6 **The extended scope of port security**

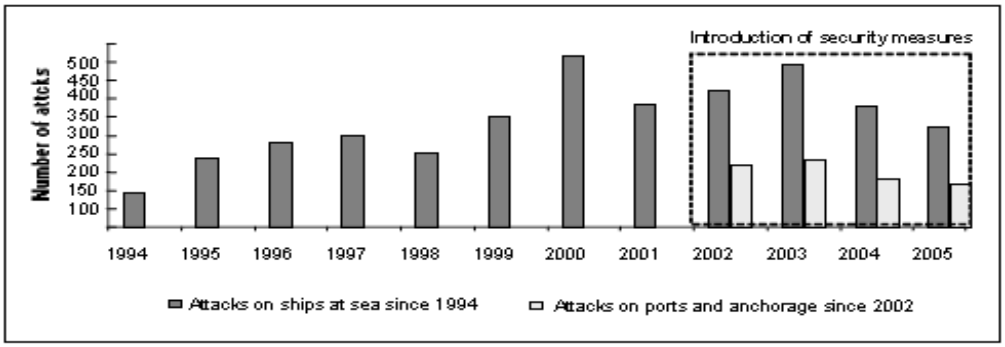
3.6.1 **Piracy/armed robbery**

Since time immemorial, piracy has been regarded as *hostis humani generis*, meaning enemies of the whole human race (Birnie, 1987: 164). Historically the piracy problem has been legally dealt with by each littoral state according to their traditional municipal law. Piracy was codified as Article 101 under UNCLOS 1982. In brief, it relates piracy as any criminal acts of violence, detention or depredation committed for private ends by the crew or the passengers of a private ship directed on the high seas against another ship, people or property on board a ship (Mejia, 2003: 159). On the other hand, the International Chamber of Commerce - International Maritime Bureau (ICC-IMB) defines piracy as "an act of boarding of vessel with the intent to commit theft or any other crime and with the intent or capability to use force in the furtherance of that act" (Abyyankar, 1999: 2). In this connection, there are two internationally recognised universal principles applied concerning piracy. Firstly, the state is obligated to suppress piracy within its own territory. Secondly, every state has the authority to exert its jurisdiction over pirate ships on the high seas. However the application of international law eventually depends upon enforcing at municipal law level (Canty, 1996: 46).

It might seem that piracy is not a criminal activity of relevance to ports, but this is not in fact the case. Although this crime is committed at high seas and in a place outside the jurisdiction of any state, it is believed much of the present day piratical attacks occur within the territorial waters of a sovereign state (Abhyankar, 2003: 139), especially attacks to ships in port areas as pointed out by Talley and Rule (2008: 90). This type of piracy that takes place within the territorial water is regarded as armed robbery. The IMO defines 'armed robbery against ships' as 'any unlawful act of violence or detention or any act of depredation, threat thereof, other than an act of 'piracy' directed against a ship or against persons or property on board such ships, within a state's jurisdiction over such offences' (Mejia, 2003: 162-163). On the other hand, Hong and Ng (2010:52) suggest that "any unlawful act of violence or detention, or any act of depredation at anchor, off ports or when underway through a coastal state's territorial waters is defined as 'armed robbery against ships'. Since the act of piracy goes beyond any boundaries, Mejia (2003: 159) asserts that, "virtually no body of water or sea was exempt from piracy".

Mejia (2003: 161) notes however that a study conducted by Dubner on piracy and armed robbery during the period 1989 to 1993 found that 61.8% of attacks occurred in the territorial waters of a country. To be precise, according to Talley and Rule (2008: 90) it occurred most frequently in port areas. Bichou's (2008) Figure 3.2, covering the period 1994 to 2005, distinguishes the attacks on ports and anchorage sites only for the years after 9/11 but it is reasonable to assume that such port-based attacks were not confined to this period. Piracy/armed robbery were already identified as illicit acts with potential to cause disruption to the economic gains of a port.

Figure 3.2: Reported Actual and Attempted Piracy Incidents on Board Ships and Ports



Source: Bichou, 2008: 13

Webb (2006), Guan and Skogan (2007) and Burns, Bateman and Lehr (2009) suggest that this was particularly a persistent scourge in SEA. Table 3.4 sets out the growing world wide trend in this problem over the period 1991 to 2011, in which the SEA claims a high proportion as against the rest of the world.

Table 3.3 : Worldwide Reported Piracy and Armed Robbery Attacks by Region (1991-2011)

Year	SEA	Far East	Indian sub-continent	Americas	Africa	Rest of World	Location unavailable	Total
1991	88	14	0	0	0	0	5	107
1992	63	7	5	0	0	0	31	106
1993	16	69	3	6	7	0	2	103
1994	38	32	3	11	6	0	0	90
1995	71	47	16	21	20	12	1	188
1996	124	17	24	32	25	6	0	228
1997	91	19	37	37	46	17	0	247
1998	89	10	22	35	41	4	1	202
1999	161	6	45	28	55	5	0	300
2000	242	20	93	39	68	7	0	469
2001	153	17	52	21	86	4	1	334
2002	165	5	52	65	78	5	0	370
2003	170	19	87	72	93	4	0	445
2004	158	15	32	45	73	6	0	329
2005	95	20	36	25	73	13	0	262
2006	83	5	53	29	61	8	0	239
2007	70	10	30	20	121	12	0	263
2008	54	11	23	14	189	2	0	293
2009	46	23	30	37	266	8	0	410
2010	70	44	28	40	259	4	0	445
2011	80	15	24	25	293	2	0	439

Source: ICC-IMB Piracy and Armed Robbery Against Ships Annual Report, Annual Report 2000, 2004, 2010 and 2011

Chalk (2008: xi-xii) claims that seven main factors accounted for the increase in piracy/armed robbery cases that contribute to vulnerability of the maritime domain. These included (i) the increase in commercial maritime traffic corresponding with large number of ports around the world; this growth has provided pirates with a wide range of tempting, high-payoff targets, (ii) bottlenecks at narrow and congested maritime chokepoints, which require ships to reduce speed thus exposing them to mid-sea interception and attack, (iii) financial crises and the economic downturn before 9/11 became a “pull factor” especially in SEA encouraging maritime crime for financial gain. At the same time economic crisis led to lack of funding in many littoral states to conduct effective monitoring regimes over their coastlines, (iv) since 9/11

more pressure exerted on many governments to invest extensively on land-based security initiatives that caused difficulties in expanding maritime surveillance systems (v) sloppy measures on coastal and port-side security that enabled thefts of goods from ships at anchor, (vi) corruption and loopholes in the judicial system. This also impacted on the emergence of "phantom ship" phenomenon in which hijacked ships are re-registered under the flags of convenience (FOC) for unlawful activities and (vii) widespread small arms proliferation provided the means for more aggressive piratical activities.

Kaneda (2005: 46), added five more reasons for the same problem to the Asia-Pacific region that made it unstable at the beginning of the 21st Century: (i) increase in volume of maritime traffic, (ii) widening of the gap between the "haves" and the "have-nots" due to regional economic development, (iii) poor economic conditions forged ties to organised criminal groups which were able to take advantage of undermanned maritime guards and of deteriorated domestic security (iv) tolerance by local authorities and (v) the work of anti-government organisations or international terrorist groups. Banlaoi (2005: 62-63) expands the list by adding long coastline, underpaid maritime forces and limited regional cooperation that aggravated this menace.

3.6.2 **Maritime terrorism**

Different to the external security threats discussed previously are politically-motivated destructive threats such as those encountered in wartime as in the case of the Second World War (Menefee, 1993) and as a means of terrorism, as in the case of the terrorist attacks. With this type of external threat the port itself, rather than any shipping present there, may become the object of attack because the wider economic consequences of disruption to port activities may be attractive to attackers.

A number of studies (OECD, 2003, Bichou, 2008, Barnes and Oloruntoba, 2005 and Bruck, 2007) have analysed the economic impact and the estimated loss resulting from terrorism in this respect. The study conducted by Johnston and Nedelescu (2005), reveals the severity of the direct and indirect costs of terrorism. These include productivity loss, increased uncertainty and boosted market volatility which impact on the money market. In the case of the attack on the vessel *Limburg* in 2002, for

example, insurance premiums were tripled for ships calling at ports in Yemen after that attack, which forced many vessels either to cancel voyages or to divert to neighbouring ports (Richardson, 2004b: 3).

In addition to this, the container revolution created the possibility of transporting WMD by terrorists which could potentially lead to destruction of a major portion of the transportation system, incurring loss of life and resulting in severe economic consequences (Erera et al, 2003).

According to Raymond (2005:181), maritime terrorism is defined as "any illegal act directed against ships, their passengers, cargo or crew, or against sea ports with the intent of directly or indirectly influencing, for political purposes, a government or groups of individuals". In a broader context, Chalk (2008: 3) defines it as "the undertaking of terrorist acts and activities (1) within the maritime environment, (2) using or against vessels or fixed platforms at sea or in port, or against any one of their passengers or personnel, (3) against coastal facilities or settlements, including tourist resorts, port areas and port towns or cities". Going beyond to institutional level, the Council for Security Cooperation in the Asia Pacific suggest a similar definition as espoused by Chalk (2008) and (Hong and Ng, 2010:52).

As such, maritime terrorism is perceived to be another part of a larger problem of "maritime violence". The act of violence perpetrated by maritime terrorists had created a profound effect on the port and shipping sectors since the incident of *Achille Lauro* in 1985. This was the first incident that brought the phenomenon of maritime terrorism to global attention and subsequently prompted the IMO to implement some security measures.

In an historical context however, Dragonette (1996) argues, the hijack of *Achille Lauro* was not the first incident of maritime terrorism known to the world. An anarchist bomb explosion aboard the German passenger liner *Mosel* at Bremerhaven that killed 128 people in December 1875 was one of the earliest incidents that qualified as terrorist attack. But in a broader perspective, the *Achille Lauro* incident demonstrated that the maritime terrorism threat was also as 'real' as piracy.

However, in comparison to piracy/armed robbery data suggesting that this was a serious problem, the evidence for maritime terrorism suggests that this only constituted 2% of all international terrorist incidents from 1964 to 2004 (Chalk, 2008: 41). In addition, Ong (2006: 13) points out, that there were only approximately forty maritime terrorist incidents carried out by various groups and organisations since the case of *Santa Maria* in 1961. This was further confirmed by Hong and Ng (2010: 52 by saying that "terrorism at sea had not been a serious international problem during the 1990s, in contrast to piracy and armed robbery against ships". A study conducted by Jenkins el at (1983) chronicling terrorist and criminal activities from 1960 to 1983 found out that a total of 111 incidents listed over the period of twenty-three years were terrorism in nature but not many were associated with maritime attacks. Writing in 1983, they argued that many terrorist groups were unlikely to treat the maritime realm as their prime target because of higher financial costs and the fact that such attacks required specialised skills. But the study never dismissed the possibility of terrorists choosing maritime assets as their future targets and indicated that a port facility might be one of these because of its unprotected nature.

This judgement proved to be correct. An aborted attempt to target the *USS Sullivans* in January 2000 did not discourage Al Qaeda from attacking the *USS Cole* in October 2000 and two years later the French oil tanker *Limburg* both off the Yemeni coast. The Al Qaeda was also believed at one point to control approximately fifteen ships flying Yemeni and Somalian flags disguised as legally registered cargo ships, which would be testimony of their capability in extending their skills to maritime terrorism (Richardon: 2004(a): 14 and Bakir, 2007: 23).

Some of the terrorist groups considered to possess maritime capabilities in the later 20th and early 21st centuries were Polisario, Abu Sayyaf Group (ASG), Palestine groups, Al Qaeda, Moro Islamic Liberation Front (MILF), Liberation Tigers of Tamil Eelam (LTTE), Lashkar-e-Taiba, JI, Harkat-ul-Jihad-al-Islami, Irguna and Haganah (Jewish nationalist movements in Palestine), and Ethniki Organosis Kyprion Agoniston (EOKA) or National Organisation of Cypriot Fighters (Menefee, 1993: 278, Raymond, 2006: 240, Talas and Menachof: 2009: 50, Sakhuja, 2009: 6-8).

Apart for this, according to Ng and Gujar (2008: 269) the scope of port security could even be expanded to a much wider political spectrum than just deterring smuggling,

trafficking, piracy/armed robbery and other crimes. But this is more obvious in post 9/11 as compared to pre-9/11 period. A good example is the failed attempt by the Dubai Ports World (DP World) to operate marine terminals in some US ports in 2006. Since the DP World was an Arab state-owned company, its direct involvement in accessing the US terminals created a political firestorm and strong opposition from the US Congress on security ground. As the effect of 9/11 attacks had deeply imprinted in the minds of the US, there was intense criticisms that the "Arab company, DP World may be coerced into providing visas for Al Qaeda operatives to legally enter the United States" (Beisecker, 2006: 4). Following Congressional opposition, the DP World eventually decided to sell its stake in the US terminals to the US entities (Frittelli and Lake, 2006: 1). The denial of security clearance of Hutchinson Port Holdings (HPH), in bidding for a port construction project in Mumbai, India in 2006 by the Indian authority is another example of political concern in port security (ibid).

3.7 **Attitudes to port security before 9/11**

In spite of a port's vulnerability, the review of port literature before 9/11 generally indicates that port security was not a grave concern for either those involved in port planning or for those involved in port administration as it was regarded as a sub-set or perhaps a small component of port function, as observed by Alderton in 1984 illustrated in Figure 3.1 above. Security was seen as just a small component of port administration. Interest was focussed on physical development through reformation and privatisation. Central attention was on increasing a port's effectiveness in supporting the growth of the national economy.

The lack of emphasis on security matters during the era before 9/11 would probably be due to the fact that there were relatively few recorded maritime terrorism incidents, despite their high profile at that time. Khalid (2005: 2) considered that "before 9-11, terrorism on cargo ships didn't even figure much on the radar of maritime security analysts" because only a fraction of the maritime domain had been tested. Spencer (2009: 24) recalled that "in those days, before we had heard of al-Qaeda and port security was not the issue it is today, families would stroll past the ship on their afternoon walks". A close resemblance to this attitude can be seen in the case of Swedish port, where Wengelin (2006: 2) explains;

> Since the very beginning, the Swedish port has been viewed as a very exotic place, a place open to the public where worlds meet, foreign flags catch the wind, and strange tongues can be heard. At night, the port changes and the activities with it. In the luring dark, players on the black market make their deals, smuggled goods are traded, prostitutes make their rounds, and fist fights break out on street corners.

Indeed one of those interviewed for this research project, a former seafarer, provided a further example of this relaxed attitude:

> I used to go to US ports in the 70s. Everything was opened. You see families come next to the ship. Fishing and bringing their dogs, where cats going for their walk, cargo operation are going on. They come up to the ship, it was so lax...You go to any American ports in 70s even 80s, there is no security. The ship comes along site in the town, you just walk and go…public just walking to the ship especially Saturdays, like parties (interview Code: 15)

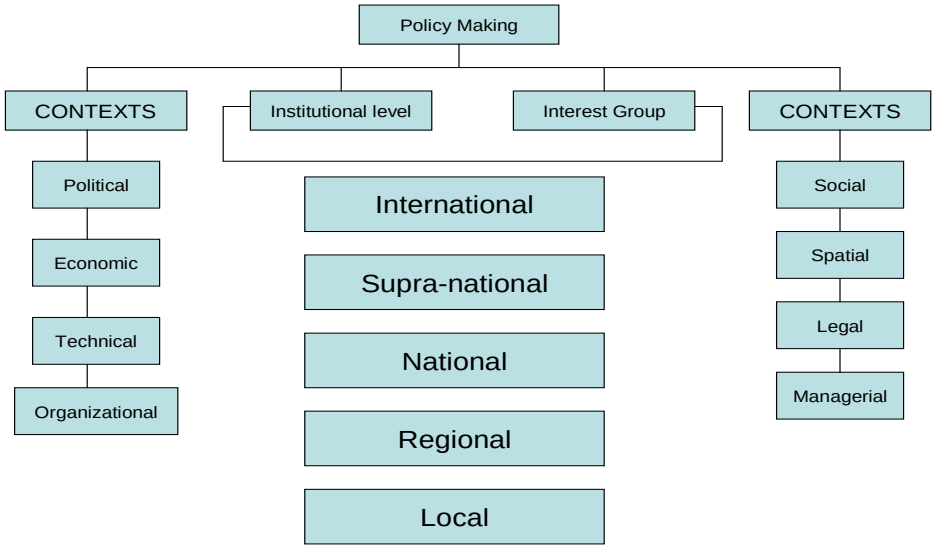
3.8 **Achieving port security: initiatives at different spatial levels**

Having looked at the various potential challenges to security that face ports, we can now turn to the measures taken to meet those challenges. For this purpose, the discussion touches on different spatial levels.

The issue of port security cannot be just confined to an individual port or even to the national perspective. As 'maritime security' itself is very international and transnational in nature, it is necessary to have a wider view of measures, looking at these through various spatial levels, following the approach espoused by Selkou and Roe (2004: 39-44) in considering the formation of shipping policy.

These authors state that policy in shipping sector is developed and implemented through five distinct spatial regimes as shown in Figure 3.3 below. They argue that the formulation of shipping policy is influenced by a variety of external factors which pose many challenges in the process of implementation at all spatial stages. One apparent problem that occurs in maritime policies across international, supra-national and national spatial boundaries is the difficulty in achieving consistency where each level of interests is fundamentally different. The conflict of interest was said to be the underlying cause of disparity in interpreting policies which consequently affects the implementation process at all these stages.

Figure 3.3: The Policy Making Process



Source: Selkou and Roe, 2004: 48

Although the model in Figure 3.3 was designed for shipping policy, its core principal can be applied to the development of port security policies before and after 9/11. However, it should be emphasised that this discussion is here confined to the first three spatial levels of pre-9/11 consisting of international, supra-national and national. The other two stages, regional and local, will be covered within the formulation and implementation at those three levels. The same principle is applied to post 9/11 situation in the following chapter.

3.8.1 **Security measures at international level**

Essentially, the IMO was silent on the implementation of matters concerning 'security' until the *Achille Lauro* incident. Although the word 'security' was first mentioned officially in the Convention on Facilitation of International Maritime Traffic, 1965 (FAL Convention) for the purpose " to facilitate maritime transport by simplifying and minimizing the formalities, documentary requirements, and procedures associated with the arrival, stay and departure of ships engaged on international voyages", the actual measure only emerged after that incident (Hawkes, n.d: 3). After adopting Resolution A.584 (14) Measures to Prevent Unlawful Acts Which Threaten the Safety and the Security of Their Passengers and Crews on 20

November 1985, the IMO subsequently issued a circular; MSC/Cir.443 on 26 September 1986 entitled *Measures to Prevent Unlawful Acts Against Passengers and Crews on Board Ships*. The same incident later led to SUA Convention in 1988 and its Protocol relating to offshore platforms. These act as anti-terrorist and crime prevention instruments for the maritime sector.

This international treaty popularly known as the Rome Convention came into force on 1 March 1992. The prime objective of SUA is "to ensure that appropriate action is taken against persons committing unlawful acts against ships. These include the seizure of ships by force; acts of violence against persons on board ships; and the placing of devices on board a ship which are likely to destroy or damage it" (IMO, 2011). Hence, the measure was intended to ensure that persons committing unlawful acts against ships would not be given shelter in any country but would either be prosecuted or extradited to a State where they will stand trial (ibid).

In addition to that circular, to further boost security, MSC\Circ.754 was introduced in 1996. This primarily related to passenger ferries operating on international routes and the ports serving those routes. The circular provides recommendations on security measures for passenger ferries on international voyages shorter than 24 hours and ports.

Prior to 9/11, between 1998 and 2000 to address other security problems, the international community through the effort of the UN adopted two instruments designed to address the problem of smuggling and unsafe transport of migrants by sea. The smuggling of migrants by sea was dealt with in Section 2 of the Protocol against the Smuggling of Migrants by Land, Sea and Air, supplementing the United Nations Convention against Transnational Crime (Roach, 2004: 44). In 1997 through Resolution A.897(20), the IMO issued guidelines for the prevention and suppression of the smuggling of drugs, psychotropic substances and precursor chemicals on ships engaged in international maritime traffic. This guideline was an amendment to FAL.5/Circ.1.

On another aspect, the IMO issued guidelines for a State to take action against any ship suspected of unsafe practices associated with trafficking or transport of migrants by sea through MSC Circular 896 on 12 June 2001. As for the measures to

overcoming piracy/armed robbery, MSC/Circ.622/Rev.1 was issued. This was a recommendation to governments for preventing and suppressing piracy and armed robbery against ships. Correspondingly MSC/Cirs.623/Rev.3 was issued as guidance to shipowners and ship operators, shipmasters and crews (IMO, 2010). In another context, the IMO also adopted Assembly Resolution A.871 (21) on guidelines on the allocation of responsibilities to seek the successful resolution of stowaways cases.

It should be noted that none of these measures were directly related to ports. It is also noteworthy that most of these IMO resolutions and circulars were recommendatory in nature instead of binding on its member states. Indeed the former IMO Secretary General, Efthimios Mitropolous commented in a speech in 2004, that the international community labelled the IMO a "'toothless tiger' with no real control over the implementation of the rules and regulations it develops" (MarineLink.com, 2011).

3.8.2 **Security measures at supra-national level**

Measures taken at supranational level refer to actions by regional associations of countries such as the EU, the Association of Southeast Asian Nations (ASEAN) and the North American Free Trade Agreement (NAFTA). Security measures at the EU often accompanied other policy formulations.[4] According to Pallis and Vaggelas (2007: 2) since early 1990, European port policies have focused on restructuring port industry and improve the service quality by integrating ports in the supply chain. This was done through Trans-European Transport Networks (TEN-T). Ideally, the purpose of this programme is to establish more integrated and efficient transportation system encompassing all types of modes by linking across Europe allowing for quicker movement of people and goods between member states and also assuring international connections (European Commission Transport, 2009). The overall objective of port policies was to set a standard framework for the service providers. In order to give effect, these policies were later transformed into EU laws. As for a long term strategy for transport sector taking into account of port and shipping, the European Commission published a White Paper (covering for the period 2001 to 2010) just one day after 9/11 (without expecting the 9/11 incident) detailing the EU transport policy

[4] The Europe Union (EU) consists of 27 countries and the whole of Europe has a 70,000 km coastline along two oceans and four seas: the Atlantic and Arctic Oceans, the Baltic, the North Sea, the Mediterranean, and the Black Sea. (Commission of the European Communities, 2007: 3). As such it needs a better protective measure to safeguard its vast coastline.

which had a broad reference to security of passengers onboard cruise vessels and ferries and also the transportation of nuclear goods (Pallis and Vaggelas, 2008: 9).

A supra-national level activity that aimed to enhance maritime security was found in ASEAN. Having the SOM as the main Sea Lanes of Communication (SLOC) in SEA, countries located here have a combined coastline of 92,451 km which is 15.8% of the world's total with 20,000 combined islands in the archipelago of Indonesia and the Philippines. This makes the sea difficult to police and it is expensive to maintain a high security standard (Banlaoi, 2009: 258). ASEAN's non-interference policy was another possible reason that made the sea difficult to control effectively. This notion was originated from the group's concept of Zone of Peace, Freedom and Neutrality (ZOPFAN) adopted in 1971 that underscores the principle of being free from any interference of outside powers (Nik, 2009: 209).

To safeguard the maritime sphere, Treaty of Amity and Cooperation (TAC) and Treaty of Southeast Asian Nuclear Weapons Free Zone were brought into effect in 1976 and 1997 respectively under the concept of ZOPFAN. But before this, the Five Powers Defence Arrangement (FPDA) was established in February 1971 involving the UK, Australia, New Zealand, Singapore and Malaysia (Nik, 2009: 210). This measure was primarily for defence purpose conducted as a joint military exercise among these countries than eradicating the actual piracy menace.

Therefore, despite the fact that maritime crime especially piracy was rampant in the SEA waters as mentioned earlier (see Table 3.4), Banlaoi (2009: 262) asserts that the measures taken at ASEAN regional level did not produce a strong positive result. Since 1967 the bulk of ASEAN maritime security measures were subsumed under the issue of non-traditional security (NTS).[5] This was due to the fact that all initiatives, declarations, agreements and plans conducted in ASEAN were through non-interference in domestic affairs of member states as enshrined in the TAC. Hence this probably would be the main reason for ASEAN's failure in taking firm measures to

[5] Non Traditional Security (NTS) threats are defined as challenges to the survival and well-being of peoples and states that arise primarily out of non-military sources, such as climate change, cross-border environmental degradation and resource depletion, infectious diseases, natural disasters, irregular migration, food shortages, people smuggling, drug trafficking, money laundering, piracy, arms smuggling, cyber crimes and other forms of transnational crime. They are mainly non-military in nature, transnational in scope—neither domestic nor purely interstate, come with very short notice, and are transmitted rapidly due to globalization and communication revolution (Anthony, 2007: 1-6).

mitigate illicit activities in SEA waters. The issue of sovereignty of national waters and encroachment are significantly serious issues among the member states. According to Yaacob (1997: 18) because of this factor, there was a lack of co-ordination among ASEAN members which makes each members state decide independently and unilaterally with respect to ratifying or acceding to the IMO convention. As a result of this, spatial measures in ASEAN may be perceived to produce a less promising result as compared to the EU prior to 9/11.

Albeit the non-interference policy and other shortcomings, ASEAN attempted to mitigate some problems through the ASEAN Ministers of Interior/Home Affairs forum. It had shown considerable concern in combating the transnational crimes that threatened its member states. Consequently, during the inaugural of the ASEAN Ministerial Meeting on Transnational Crime (AMMTC) on 20 December 1997, the ASEAN Declaration on Transnational Crime was adopted for greater regional collaboration to fight against such menace. This was the first organisational document to identify sea piracy as a problem for regional concern which also included terrorism. In June 1999, AMMTC adopted a Plan of Action to Combat Transnational Crime which committed members to:

> Work on the criminalisation in ASEAN member Countries of specific transnational crimes such as illicit drug trafficking, money laundering, terrorism, piracy, arms smuggling and trafficking in persons (Pushpanathan, 1999: 3).

In order to enhance regional cooperation, the Plan also committed members to:

> Enhance information exchange with ASEAN Dialogue Partners, regional organisations, relevant specialised agencies of the United Nations and other international organisations, particularly towards the sharing of critical information on the identities, movements and activities of known transnational criminal organisations (Pushpanathan, 1999: 3).

It seems that most measures taken at supra-national level before 9/11 are generally covered for a wide spectrum of maritime domain and transportation sector like in the case of the EU and ASEAN. However, in ASEAN's dimension, their measures did not target specifically to ports. The prime reason can be related to ASEAN's strong sentiment of sovereignty that did not allow for any external inference. Therefore, port security measures are managed by the individual states.

3.8.3 **Security measures at national level**

Security enhancement at national levels is mostly done through domestic rules and regulation. There is a paucity of academic publications referring to specific measures on port security at national levels. Most initiatives at national level were based on the guidelines provided by international and regional organisations. These were then given effect to national or municipal law by the contracting parties.

Despite this paucity, some examples of the UK and the US are worth mentioning. There are approximately 1,000 ports and terminal/wharf facilities in the UK (Baird and Valentine, 2007: 69). By having a total coastline of 19,491 miles (Darkes, 2008), port security in UK was given serious consideration following the *Achille Lauro* incident in 1985. Realising the potential increase of terrorism threat in the transportation system, to circumvent any untoward happening, in 1990 the British government made the Aviation and Maritime Security Act a mandatory law applicable to all UK ports and vessels (including foreign registered vessels) in its waters. The purpose of this legislation was to protect ships, persons and property on board ships, harbour areas, and persons or property in harbour areas from acts of violence. The act gave power to police and security staff to search ships, harbour areas, property and people for firearms and weapons. The Department of Transport took full charge in providing a legal framework and monitored the security standards (Saunders, 1993: 83-84). In this connection, the Customs and Border Agency has also played a role in different aspect of security at sea particularly in terms of interdicting illegal goods and illegal immigrants. Normally, this type of enforcement is noticeable in most countries around the world as permitted by the UNCLOS 1982 provisions.[6]

The US has 361 seaports in 50 states with more than 3,700 cargo and passenger terminals and over 1,000 harbour channels spreading along 95,000 miles of coastal waters. Under the Ports and Waterways Safety Act of 1972, the United State Coast Guard (USCG), part of the US Department of Transportation, had charge of patrolling ports for illegal drugs, undocumented immigrants and drug interdiction, while

[6] For example, Article 21 (1) (h) of UNCLOS 1982 under the sub-heading "Laws and regulations of the coastal State relating to innocent passage" states that "the coastal State may adopt laws and regulations, in conformity with the provisions of this Convention and other rules of international law, relating to innocent passage through the territorial sea, in respect of all or any of the following: (h) the prevention of infringement of the customs, fiscal, immigration or sanitary laws and regulations of the coastal State. This is also extended to Contiguous Zone under Article 33 (1).

maintaining its identity as a military service (Caforio, Kummel, Purkayastha, 2008: 112). Before 9/11, most USCG operational hours were dedicated to search and rescue task, along with enforcement for protecting fisheries, interdicting illegal migrants at sea and controlling drug movements.

One of the laws used as an instrument for this purpose was the Merchant Marine Act of 1936 (Frittelli, 2005: 10). To beef up port security, a joint effort was also established between the proprietary force and local police. They provided physical security to port by focusing on access control, cargo security, passenger and crew security (Haveman, Shatz, and Vilchis, 2005: 2).

Looking at the total perspective of all these policy measures however, Brook and Pelot (2008: 213) observe that port security pre-9/11 was generally a failure for ignoring the following aspects: (i) port security involves multiple jurisdictions, (ii) it is part of larger supply chain security challenges; (iii) considerable disparity and complexity internationally, (iv) significant problem with privacy issues in information sharing; (v) ever-present issue of timing of initiatives; (iv) costs, and (vii) the measurement for effectiveness and continuous improvement. They further argued that the nature of ports which is interlinked with much longer chains in total transportation system made the issue of security more complex with the absence of a risk-based approach. In the same vein, Harrald, Stephens and vanDrop (2004: 1) claim three reasons corresponding to poor port defence system. These are (i) poor information sharing to security personnel about any immediate threats at any given time, (ii) lack of understanding of the vulnerabilities and (iii) difficulties in anticipating the risk accurately to bring scarce resources to produce better result. As such, the policy measures that followed in the aftermath of 9/11 through a wide range of security requirements had attempted to tackle such failings but undoubtedly created many challenges to the interested players. This will be discussed in detail in Chapter Seven and Eight.

3.9 **Conclusion**

This chapter has discussed some of the key concepts in this research, in order to obtain a better understanding of the subject of this study. Port development, its relationship to shipping and connection to national and international economic

development through trade facilitation have been discussed in order to provide the necessary context. Along this line, the chapter also brought to light the revolution of containerisation in the port and shipping sector that prompted port modernisation and privatisation. However, the transfer of ownership to the private sector became an issue for the government in overseeing security matters. Nonetheless security was regarded as a subset of safety in overall port management. Looking at port security itself, the study has distinguished internal and external security aspects. Internal security threats are matters concerning cargo theft and pilferages whereas external threats refer to smuggling, stowaways and armed robbery and politically motivated acts. Port security before 9/11 was not generally regarded as a serious problem, though some maritime terrorist attacks had prompted international regulation, and intervention at any level of governance was limited. Port security before 9/11 was considered weak due to poor defence systems with the absence of a risk-based approach. Security measures of pre-9/11 are summarised in Appendix IV. The next chapter takes us to port security in the post 9/11 era when it was perceived to be more challenging.

CHAPTER FOUR

PORT SECURITY AFTER 9/11

4.1 Introduction

This chapter considers the various security measures introduced in ports after 9/11 at a global level with data gathered from secondary sources. Obviously port development and port security in both developed and developing countries are interrelated and connected albeit with different features. The evolution of ports over time especially in advanced countries like the UK, US and other Western states has brought a different outlook due to technological advancement as compared to developing states which are more labour intensive. However the situation is changing through port reform in the developing economies due to the process of privatisation that were actively taking place from the 1980s as mentioned in the preceding chapter . But as we have seen, the issue of port security had not received much attention in these developing countries during the process of port modernization as the focus was usually on physical development, reducing the work force and cutting the public expenditure. There were no significant global worries about maritime security threats except a few high profile incidents on attacking vessels by terrorist and the rising issues of piracy and cargo theft during the era before 9/11.

Recognising that port reform is a continuous process irrespective of the status of a country's economic development, this chapter considers the way in which the literature shows that attitudes to and practices in port security have changed or altered as a result of 9/11. Although maritime trade is a core component of the world economy, security nevertheless had been less important factor in the design or evolution of the world economy. However the 9/11 attack made it clear that revolutionary changes in maritime and port security became fundamentally prerequisite from thereon (Harrald, 2005: 1). Therefore, in the interests of national economy and defence, greater attention and/or resources have been devoted to ensuring security at all levels from international organisations such as the IMO and International Labour Organization (ILO), governments, port authorities, private operators, shipping lines, shippers and intermodal freight forwarders/customs brokers and other related stakeholders. The analysis which follows distinguishes between the three spatial levels and some security measures in the selected economies.

4.2 **The security scenario after 9/11**

Owing to the fact that the total security scenario in the port industry has changed in the wake of 9/11, these changes can be related to the changes in the attitudes of various stakeholders. A simple example of change in attitude which led to physical changes because of the regulatory requirement is described by Wengelin (2006: 3):

> The post – 1/7 2004 port is different. The change has in most cases been substantial: fences with manned gates surround all ports; identity checks are performed on all passages through the gates; and CCTV cameras cover large areas of the perimeter. This change has not passed unnoticed by the public…the public being kept out of traditional fishing sites, bird watching etc.; the underlying reasons for the implementation of the [ISPS] code were hardly mentioned.

According to Barnes and Murray (1996) and Banlaoi (2009), one main reason for serious attention and immediate action in port security from the international community was because of the notion that the sea is an anarchic domain that can hardly be policed even today. Although historical and empirical evidence indicate that there are not many maritime terrorism cases since 9/11 except some cases such as *Limburg* (2002) and attacks on the Israeli *Port of Ashdod* (2004) as compared before 9/11 by referring to the several high profile cases such as *Achille Lauro* (1985), *City of Poros* (1989) and *USS Cole* (2000),) all these strikes confirmed the worries of maritime security experts that it would not be beyond the capabilities of terrorists to conduct assaults on maritime interests such as ships and ports. According to Shie (2004: 9-10) there are three possible reasons why terrorists could target maritime assets. These include (i) marine based attacks will receive a greater media attention, (ii) the link between maritime targets and global commerce provides an avenue that disrupting national economic affairs could potentially affect the international trade and (iii) sinking a ship in a strategic sea lanes could potentially impede the international commerce.

As Moore (2003: 49) adduces "the terrorist cycle begins with several targets…then seeks to find vulnerabilities that can be exploited…having a fairly detailed description of the potential targets, seeks to find those with the combination of vulnerability to attack, psychological and political significance and which, if attacked, poses the least risk to the terrorists". This type of strategy which termed as 'new terrorism' emerged

after 9/11 signals a departure from states to non-state actors to wage war against another. Their primary aim is to create catastrophe with a political motive (Sandole, 2004: 1). Technically, the strategy adopted by terrorists is difficult to gauge and unforeseeable thus triggered trepidation that they may turn their attention from land to maritime vessels and also port facilities where these assets face a tremendous risk of maritime terrorism (Khalid, 2005: 2, Banlaoi, 2009: 254).

Price (2004: 330-331) supports Hecker's argument from the US General Accounting Office (GAO) who said that, "ports are inherently vulnerable to terrorist attacks because of their size, generally open accessibility, metropolitan area location, materials transported and ready transportation links to many locations…" The repercussions will be enormous if there is any failure in protecting the port. Thus Brook and Pelot (2008: 204) emphasised six key areas that port could encounter in consequences of failure to establish security; namely (i) destruction of port property, (ii) consequential supply chain impact, (iii) economic impact, (iv) environmental damage, (v) people impact and (vi) damage to port's reputation.

According to Blumel et al (2008), security threat to seaports through terrorism is just one component of unlawful acts which emerged more prominently after 9/11, but such incidents as property violation, robbery, fraud, stowaways, contraband and vandalism should not be overlooked as well.[7] If one asks a question what causes all these unlawful incidents in the maritime context, the answer is to look for the place of origin which is essentially land. For example Jenisch (2009: 124) points out "anarchy on land easily leads to piracy at sea". Mejia (2009: 12) therefore suggests "the true solutions to the problems of piracy, armed robbery against ships, terrorism, and other maritime crimes lie not at sea, but on land". This land based terrorism apparently originates for various reasons but a survey conducted by the authorities on terrorism in 1985 identified that state sponsorship, ethnic conflict, religious fanaticism and ideological conflict are among the prominent factors (Brook and Pelot, 2008: 232).

[7] It was reported in 2008 that that pirates are also pretending to be stowaways (Flynn: 2008: 25). In a worst case scenario, terrorist act as a stowaway as a case happened in October 2001, when port authorities in the southern Italian port of Gioia Tauro discovered a stowaway within a well-appointed shipping container complete with bed, heater, toilet facilities and water. The suspect held various technological gadgets, security passes and airline tickets (OECD, 2003: 8).

Judging from the vulnerability of seaports where seaports form a key transport and logistics node between maritime and hinterland processes, comprehensive security therefore becomes highly important in the maritime domain as a whole. Thus the realisation of the significance of security in the total transportation chain has arguably changed the attitude of various maritime industry players. This then followed by the changes in practical aspects.

4.3 **The impact of 9/11 on attitude and practice to port security**

According to Harrald, Stephens and vanDorp (2004: 1) the potential danger to the six key areas in the port sector as identified by Brook and Pelot (2008) could easily become a reality because of the poor available defensive measures before the 9/11 era. This arises due to three main reasons as explained in the preceding chapter. First, in spite of recognising terrorist capacity to inflict damages by any means, the responsible authorities for the port security are unlikely to be well-informed about profiles of immediate threats at any given time. Second, there may be a lack of understanding of the inherent vulnerabilities in the complex economic system and, third, risks are difficult to anticipate accurately in bringing limited resources to produce an effective result.

Hence, considering these potential dangers, the 9/11 incident has changed attitudes to ports in a number of ways. One such change can be viewed in the overall logistic sector where the port is one component. The merits of the intermodal logistics chain have been viewed somewhat differently chiefly for the reason that the port has not just become an integral component of the transport system, but is a major sub-system of the broader production and logistics system. Additionally it may often consist of four-modal nodes where ocean ships, short-sea/river ships and road and rail modes converge (Almotairi and Lumsden, 2009: 198-204). Over time the port industry has grown drastically and become an integral part of a supply chain.[8] According to

[8] The term *logistics* refers to "the function for the flow of materials from suppliers into an organization, through operations within the organisation, and then out to customers" (Waters, 2003: 5). Materials are inclusive of both tangible and intangible. On the other hand *supply chain* referred to "series of activities and organisations that materials move through on their journey from initial suppliers to final customers" (Waters, 2003: 7). Additionally, *supply chain* is also considered "combination of organizations and service providers that manage the raw material sourcing, manufacturing, and delivery of goods from the source of the commodities to the ultimate users. Organizations directly involved in the supply chain include raw material providers such as mines, farms, manufacturers that enhance the value of raw materials, wholesalers, distributors, and retailers. Other stakeholders involved

Coulter (2002: 140) this has made ports the key point on a nation's border with one of the weaker barriers to entry and also the weakest link in the logistics chain, so providing a good avenue for causing destruction. In the modern growth of global trade containers have become the cheap medium for movement of almost every types of cargo in an intermodal supply chain comprising different transportation means. The container is not only being moved by sea transport but also through land transport, where it may in turn be moved in different types of transport, road or rail. The port, forming part of the supply chain, naturally has to be designed in such a way to enable trade to take place with the support of such different transport players (Pallis and Vaggelas, 2008: 2).

As such, the port is highly vulnerable to disruption by external forces by means of transporting weapons or any dangerous material for malicious purpose. As Jayakumar (2006) points out that "the global supply chain is only as secure as its weakest link. Hence any programme to raise its security must address all parts of the chain and not just selected parts of it". Meersman et al (2009: 143) argues that in spite of this weakness, the success of the chain as a whole depends on the competitive strength of incorporated ports and conversely the success of ports depends upon the competitive strength of logistics chains. In this regard, Blumel et al (2008:209), expressed their views that the hinterland part of port which connects through multimodal transportation from sea to port and vice versa should be given considerable attention as it forms an essential component of overall security in port sector.

Although the port acts within a holistic and complex logistics chain system, the concern for the port is somehow different. Some of the old concerns about port operations were put into a new context in the period after 9/11. Johnstone (2006:2) aptly described the situation of the US ports prior to 9/11 as;

> On September 10 we were not a nation at war. On September 10 we were a nation bedevilled by delays, concerned about congestion and impatient to keep moving.

However the events on the next day made an impact on every aspect of port practices and security. The port reform that had rigorously took place before 9/11 mainly driven

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with supply chain operations include governments, carriers, and terminal/port operators" (Closs and McGarrell, 2004: 8).

by globalisation of maritime trade and reconfiguration of the role of the state (Hill et al, 2008: 94) was turned into a different dimension. As Capt. Dave Scott, the Commander of United Stated Coast Guard (USCG) Sector Delaware Bay commented "globalization required rapid cargo throughput and safe, efficient seaports. The 9/11 attacks changed that paradigm. After 9/11, the maritime community realized that security was as essential to successful seaports and marine transportation as safety and logistic efficiency" (Helmick, 2008 :16).

Harrald (2005:159 - 161) argues that the post 9/11 era coupled with the effects of globalisation created potential vulnerabilities in the sea-trade system because of the stronger global economic growth. This can also be interlinked with the growth of containerisation as 90% of global trade in volume is moved by sea trade. UNCTAD in 2011 Annual Report states that in 1990 world container throughput volumes were approximately 85 million TEUs but the figure has grown to six-fold by registering 531.4 million TEUs in 2010.

In this regard, one could simply describe the contemporary maritime commerce as "shipping means containers". The current scenario means that almost all consumer or physical goods are transported through containers. Global estimates show that approximately 232 million containers were moved in world wide ports each year (Blumel, 2008: 209). However, in addition to containers, goods are also transported in other types of sea going vessels such as bulk, Liquefied Natural Gas (LNG) and Liquefied Petroleum Gas (LPG) or even small boats. These types of vessels can be the vector for, or target of, attack. Additionally containers and these vessels also serve to raise revenues for terrorist organisations through illegal means (Blumel, 2008: 209).

Some commentators have focused on the direct maritime involvement of terrorist organisations. *The Washington Post* noted in a report of 31 December 2002 that Al Qaeda's capability to own and operate fifteen cargo ships clandestinely in the international maritime commerce meant that it could possibly use these vessels to perpetrate violence against any targets (The Washington Post, 31 December 2002). Similarly, other terrorist networks have varying levels of maritime expertise and capabilities and could possibly endanger the maritime world as noted in Chapter Three. In this instance, LTTE which had terrorised the Sri Lankan government for political reasons has owned and operated a fleet of at least a dozen deep-sea-going

ships registered in Honduras, Panama and Liberia to run a legitimate commercial activity but at the same time facilitated logistic support for transporting illegal materials (Sakhuja, 2008, 44 and Sakhuja, 2010, 8). The scenario suggests that there are some weaknesses in the way ships are managed in the maritime world that provides a good opportunity for terrorists to enhance their maritime capabilities. One of the main reasons was laxity in ship registration under some FOC (Ozcayir, 2000). The perpetrators can cover their true identity in the pretext of being legitimate shipowners or ship crew members. These are further examples of terrorist capabilities in inflicting huge disaster if maritime transportation is not protected reasonably well.

Whereas previous terrorist incidents, including *Achille Lauro* and *USS Cole* had made a political point but little loss to human life and resulted in limited damages, after 9/11 the potential economic impact became a matter of concern. An assessment set out in Table 4.1 of the economic impact of a terrorist attack was made in a 2002 Brookings Institute study.

Table 4.1: Summary of Brookings Institution's Study Showing Economic Disruption Resulting from Terrorism

Nature of attacks	Nature of Economic Disruption	Potential costs (USD)
Weapons of mass destruction shipped *via* containers, mail.	Extended shutdown in deliveries; physical destruction and lost production in contaminated area; massive loss of life; medical treatment for survivors.	Up to $ 1 trillion
Efficient release of biological agent through much of a major urban area.	Disruption to economic activity in affected area; threat to confidence and economic operations in other areas; massive loss of life; medical expenses.	$750 billion
Widespread terror against key elements of public economy across nation (malls, restaurants, movie theatres, etc).	Significant and sustained decline in economy activity in public spaces; associated drop in consumer confidence.	$250 billion
Large attacks that expose a finite and reparable vulnerability (like 9/11).	Substantial but temporary weakening of economy due to direct (loss of human life and physical capital) and indirect effects (decline in confidence and network failures).	$100 billion
Cyber attack on computer systems regulating regional electric power; combined with physical attacks on transmission and distribution network.	Regional electricity shortages that persists for a week; health risks from heat/cold; interruption of production schedules; destruction of physical capital.	$25 billion
Bombings or bomb scares.	Effective shutting down of several major cities for a day.	$10 billion

Source: Shah , 2004: 6

In another context, a war game in port security conducted by a consulting firm in the U.S, Booz Allen Hamilton in October 2002 running strategic simulation by discovering "dirty bombs" in cargo containers at three US ports estimated that the cost to the economy from the resulting disruption of trade was about USD58 billion.[9] The results showed that even a relatively small nuclear weapon detonated in a major seaport might kill between 500,000 and 1 million people; directly destroy up to USD500 billion worth of property; cause losses due to trade disruption of USD100 to USD200 billion and impose further indirect costs of up to USD1.2 trillion (Kanev, 2005: 196-197). In a worst case scenario demonstrated through a study conducted by Department of Transportation's Volpe Centre, it was estimated that the explosion of a 10 to 20 kiloton weapon in a container would cause a disruption of trade valued at USD100 to USD300 billion, property damage of USD50 to USD500 billion and the loss of 50,000 to 1,000,000 lives (Harrald, 2005: 158).

There was, of course, nothing new in identifying the wider economic impact of interruption to trade. In the context of SEA where it has one of world's narrow sea passage or "chokepoints", the SOM, a study carried out by the Centre for Naval Analyses in 1993, revealed that the closure of this Strait due to any major disaster would have massive economic implication for world trade. It was estimated that diversion of ships around the SOM would cost the world economy USD3.5 billion to USD8 billion. The study estimated that the port blockage cost for Singapore would be USD130 billion. If all major SEA ports were closed, the cost to the global economy was estimated to be over USD230 billion (Noer, 1996: 47-48). What arguably new after 9/11 was the identification of terrorism as a possible cause of such interruption.

The argument that the maritime environment is an easy target has also focussed on the capability of the maritime perpetrators who could, it has been alleged, easily perform covert shipment of people, arms or a variety of WMD including chemical, biological, or radiological ones in containers from origin to destination; use a small vessel approaching a large vessel with an explosive on board; use the vessel as a battering ram into a bridge or other infrastructure, sink a vessel in a navigation channel, or, in

[9] "Dirty bomb" is described as radiological bomb. It is a conventional explosive such as dynamite or ammonium nitrate that has been packaged with radioactive material which scatters when the bomb goes off. It contains radioactive material, but does not use that material to produce a nuclear explosion (Richardson, 2004: 51).

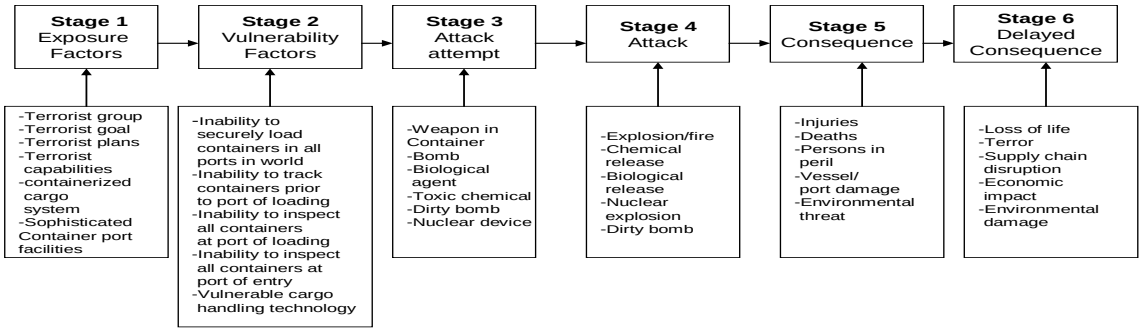
the case of a cruise ship, cause death of a large number of people; or cause major disruptions to port operations, military shipments and international trade through destruction of key assets such as container cranes and pier facilities or blockages of key facilities (Yim and Downey, 2002: 3). According to Brooks and Pelot (2008: 203), other potential security hazards threatening ports such as cyber attacks by stealing, corrupting or destroying port or supply chain information or communication equipments should also be given equal attention.

Some of the commentary on maritime port security since 9/11 focussed on the particular difficulties here in comparison with airport security. Basically, access to an airport is more easily controlled because of a *buffer zone* between airport and other activities. This gives the ability for the aviation system to stop, check and restart in the wake of a terrorist attack (Yim and Downey, 2002: 6 – 7). However, ports may not have a clearly defined parameter, even on the landside where they might be located in or adjacent to heavily populated urban areas. This is due to the fact that ports vary physically by virtue of geography, topography, surroundings and population (Bateman, 2006: 84). Therefore security of ports must consider all environments comprising of land, air, sea surface and sub-surface (Bateman, 2006: 84). In such an environment, it has been concluded as very unlikely that the same response as in the aviation system could be activated in the port sector in the event of any terrorist attack (Yim and Downey, 2002: 6 – 7). This is the reflection of ports vulnerability and 'softness' as easy targets. Further, Raymond (2006: 255) infers that "the most significant development seen in recent years that has affected the extent to which maritime terrorism poses a threat is the "hardening" of land targets following 9/11. The 'soft underbelly' of the maritime industry is now by default, one of the new targets of this global terror".

Referring to port's vulnerability as described above, a phenomenal change in the attitude of maritime stakeholders took place with the influence of policy decisions made at various spatial levels. One such influence begins from the rule making body of international organizations such as the IMO where most polices made at that stage will be transposed into supra-national and national regulations subsequently. It should be emphasised here that such decisions were made because of the embedded complexity in the port system particularly in the containerized cargo system. Figure

4.1 elucidates the port security event chain in the containerised cargo system. As argued before, containerisation contributes a significant form of global trade, thus the risk encountered by seaports in handling the sheer volume and number of goods transported through this medium is perhaps foremost among the risk associated with ports (OECD, 2003). The concept of 'risk' in this context can be defined as "the likelihood of occurrence of an event and the impacts of the event should it occur" (Harrald, 2005: 161). Therefore the embedded weaknesses demonstrated in the containerised cargo system offers the possibility for perpetrators to use this medium in causing the desired consequences.

Figure 4.1: Port Security Event Chain: Containerised Cargo System



Source: Harrald, 2005:162

4.4 The contributing factors to changes in approaches to port security

4.4.1 The United States initiatives – national level approach

In this part it is appropriate to begin the discussion with the US initiative which is regarded as a national approach instead of international and supra-national approaches when we take into consideration of the US influence and its lead role in determining numerous security regimes imposed upon the international maritime community.

There are a number of reasons to explain why the maritime transportation industry perceived security issues in a different way in the post 9/11 era. Given the fact of the

port's vulnerability and its consequential effects as shown in Table 4.1 above, the US foremostly viewed this matter very seriously. As the direct victim of the 9/11 terrorist attacks, the US considered that any major catastrophe affecting maritime assets had the potential to seriously damage not only global commence but also its own domestic economy. For example according to Goodrich (2002) the 9/11 attacks had caused an immediate negative economic impact to the US travel and tourism industry. The same result is potentially possible to shatter the maritime sector where ports are regarded as a fundamental pillar in facilitating the US economy. This had drawn considerable concern of the US administration (Frettelli, 2008). In another context, the US equally paid serious consideration to waging "the war against terror" immediately after 9/11 when it recovered strong evidence during the invasion of Afghanistan in October 2001 of the intention of the Al-Qaeda and its associated terrorist groups to invest extensively in developing technologies, tactics and techniques for conducting maritime terrorist operations. The recovery of training manuals and attacks plans targeting naval and commercial maritime shipping in Asia, the Gulf and in the Mediterranean was the primary contributing factor leading the US to push its security defence border beyond its legitimate waters (Richardson, 2004: vii).

It is estimated that the top fifty ports in the US account for 90% of all cargo tonnage and twenty-five of them account for 98% of container shipments. Additionally the US receives more than 10,000 ocean going container vessels from around the world calling at its ports annually (Cannon, 2008: 1-2) by handling 41 million TEUs in 2007 and 39 million TEUs in 2008 respectively, a little decrease in 2008 due to global economic down turn (IAPH, 2010). Consequently being one of the world's leading maritime trading nations, accounting for nearly 20% (measured in tons) of the annual world ocean-borne overseas trade, 25% of the US Gross Domestic Product (GDP) is supported through maritime trade and 95% of this trade is dealt with non-North American traders (Frittelli, 2005: 3).

In response to this alertness, the US took several drastic measures to fill in its existing security gap. Although 9/11 created huge impacts for the US, that very incident became a wake up call for the whole world and triggered warning of imminent terrorist attacks at any time and in any form. This was one of the realisations that brought changes in attitude towards security at various spatial levels in which the

maritime industry players were requested to adhere to the rules made, especially those originated primarily from the international organisations such as the IMO. The change was brought forward with the forceful contribution of the US and its persistent influence in the international arena. Before the IMO introduced global security policies, the US played a crucial role through this Organization and several other international bodies such the UN, ILO and World Customs Organization (WCO) to push for tougher security regimes in the global commercial agenda (Wengelin, 2006 and Pinto, Rabadi and Talley, 2008). In this context, Scott (2010: 82) rightly points out:

> It is well recognized that the US was the chief architect of the network of international organizations and treaty regimes established following World War II. In many instances, the US provided the draft text of a treaty based on recent US legislation so that the treaty served in effect to extend that legislation beyond US borders.

In a swift response to protect its 361 ports, 5,000 facilities, 10,000 vessels and forty offshore facilities from any terrorist attacks and protecting 6.5 million cruise ship passengers' and 32 million vehicles carried through ferry system (Yim and Downey, 2002: 1), in February 2002, the U.S. Congress began working on legislation that would become the MTSA. Simultaneously, the U.S. delegates to the IMO proposed a similar initiative (based on MTSA but to be implemented at international scale) to the IMO's Maritime Safety Committee (MSC). Following some initial hesitation, this proposal was largely incorporated into the ISPS Code, which was approved on December 13, 2002 (Pinto, Rabadi and Talley, 2008).[10]

In recognising the threat of maritime terrorism after 9/11, the US adopted a two-pronged approach to obtain international cooperation although some of the measures are more prone to their interest. Firstly, in addition to the activities within the IMO, the US also worked closely with the UN Security Council and the IMO in ensuring that member countries imposed new measures to deal with the threat of maritime terrorism. Secondly, the US used its power and influence to get cooperation from other states through bilateral agreements by establishing 'coalitions of the willing' (Beckman, 2005: 248). Wengelin (2006: 3) argues that this is one effective United

[10] As of 2010, the ISPS Code was applied in 148 countries around the world (Metaparti, 2010: 729).

States foreign policy strategy, directed at its trading partners, designed to protect its own interests. In this 'power play' scenario, with mis-matched players, non-compliance was not an option for those countries concerned to maintain economic ties, and good political relations, with the much stronger United States. The security regimes such as the ISPS Code are meant to make the international maritime community obliged to protect the US interest. The strong US influence can also be seen in another international treaty. Wengelin (2006: 4) quoted a good example of the observation of the chairman of the IMO Legal Committee during the process of amending the SUA Convention. The chairman described briefly the manner of the US exerted its power:

> The political pressure was so strong that it [US] virtually dictated the direction in which the final resulting convention should go…A superpower was in the lead with the determination to achieve certain pre-arranged [sic] goals…It was felt as if the place and the chairman had been lent out to other people.

Basically the essence of the ISPS Code which was introduced by IMO is based on the U.S' MTSA, an amendment to the 1936 Merchant Marine Act. However, the MTSA was designed to protect the U.S. ports and waterways from terrorist attacks and signed into law in November 2002 (Boske, 2006: 42), whereas ISPS was a framework adopted to create security standards for the ship and port facilities in the international maritime industry. The US adopted the whole ISPS Code (part A and B) as a mandatory requirement which was not the case for many countries around the world. The expansion of this Code to its territory was done through the MTSA. This implies that all vessels calling at the US ports shall not only meet the ISPS Code requirements but also the MTSA (Zhao, Chun and Ruan, 2005: 132).

In order to give effect to all the security initiatives adopted at the national level, the US government established the Department of Homeland Security (DHS). The US national initiatives have brought far reaching implications to the international maritime communities where in many cases the developing economies are obliged to follow. Consequently, ships sailing from non conforming countries to the US ports are bound for rigorous inspection. For example ships that have visited some of the African countries (Democratic Republic Congo, Guinea-Bissau, Liberia and Mauritania) experience this tough measure quite often (Kent, 2005: 8 – 9).

In addition to this, in the initial stage of the ISPS implementation when the Code came into force on 1 July 2004, the US was most visibly active enforcing this Code with 8.5% of inspections in the first month resulting in enforcement actions including denial of entry, expulsion or detention. Most non-compliant vessels under this category were reported to belong to FOCs (McNaught, 2005) which basically originated from the developing economies.[11] Corresponding to this type of vessels, a study conducted by Yilmazel and Asyali (2005) for the implementation of the ISPS Code from 1st July 2004 to 1st April 2005 under the major Port State Control (PSC) regimes – the inspection of foreign ships in national ports for safety reasons around the world - found that the detention rate under the USCG regime for substandard ships that did not conform to ISPS Code requirement accounted for 46% of the 100% of all detentions world wide. The study also reveals that 45% of the overall detentions in the USCG regime were attributed to FOCs[12]. This implies that although the PSC regime is meant for safety reason, the US still detained ships to bolster its security standard using the same measure on the ground of security.

In addition to the MTSA 2002 and the ISPS Code, the US government undertook other firm measures assessed to be filling up a 'security policy gap' but brought significant impact to the international community. Amongst the highlights are the '96 hour rule' '24 hour rule', Container Security Initiative (CSI), Customs-Trade Partnership Against Terrorism (C-TPAT), Security and Accountability For Every (SAFE) Port Act, Transportation Workers Identification Credential (TWIC), Mega Port initiative and many other layered approaches (Pallis and Vaggelas, 2008: 4-9).[13]

[11] There are 32 countries declared as FOCs by the International Transport Workers' Federation (ITF). The list shows that majority of these countries are developing nations (International Transport Workers' Federation, 2010).

[12] Port State Control (PSC) is the inspection of foreign ships in national ports to verify that the condition of the ship and its equipment comply with the requirements of international regulations and that the ship is manned and operated in compliance with these rules...It provides a "a safety net" to catch substandard ships" .In addition to that operated by the USCG, the major Port State Control regimes around world are as follows: Paris; Tokyo; Acuerdo de Vina del Mar; Caribbean; Abuja ; Black Sea ; Meditterranean ; Indian Ocean;Riyadh (International Maritime Organization, 2012).

[13] *96-Hour Advance Notification of Arrival* - a security screening procedure introduced in 2001 by the USCG and the US Immigration and Naturalization Service to facilitate vessel boarding efforts. This procedure requires all vessels bound to US ports must provide a Notification of Arrival 96 hours in advance of their arrival. *24-Hour Rule* – a regulation implemented by US Customs since 2003 requiring Non-Vessel Operating Common Carriers (NVOCCs) to provide the agency with details of the contents of sea containers bound for the US – 24 hours before being loaded on board. The rule allows

The main highlight of the US initiatives which become part of the supply chain programmes according to the related sector is shown in Table 4.2. By using the power and influence to get the international community to agree on some of the US security defences especially the CSI and C-TPAT, the method adopted is a layered approach consists of four zones i.e. foreign port, offshore, coastal and dockside (Pinto, Rabadi and Talley, 2008: 226).[14] One of the strategies under this approach is to extend the US zone of security outward so that American borders become the last line of defence instead of the first (Khalid, 2005:3).

Table 4.2: The List of US Initiatives to Enhance Supply Chain Security

Port & Cargo related	Ship related	Other supply chain related
ISPS Code Implementation / Enforcement	Advance Notice of Arrival	Participation in International Forums (e.g, APEC Trade Recovery Workgroup)
24-Hour Rule	Long Range Identification and Tracking of Vessels	Maritime Domain Awareness Program
Container Security Initiative		Rail Protocols for Transportation of High-Risk Hazardous Materials
Container Security Devices		Air Cargo Security Programs
Customs-Trade Partnership Against Terrorism		HAZMAT Truck Tracking Program
DOE Megaports		Hazmat Threat Assessment program
Secure Freight Initiative		Enhanced Security Measures for Highly Hazardous Materials
CBP Cargo Screening		Federal Security Clearances for State Departments of Transportation
International Port Security Program		Certain Dangerous Cargo Tracking
Non-Intrusive Inspections and Radiation Scanning Technology		Freight Railroad Security Plans

US Customs officers to analyze the information of the containers' contents and identify potential terrorist threats before they arrive at American ports (Khalid, 2008: 5-6). The explanation on C-TPAT and CSI is given in the main text as they are some of the key initiatives. The Megaport Initiative is another set of layered approach. Malaysia is one of the countries party to this initiative. Further explanation is given in Chapter Seven.

[14] Layer 1: The foreign port zone is the far-out-to-sea-as-possible security defence for US ports. For a vessel arriving at a US port from a foreign port for which there are security concerns, the USCG may deny entry or prescribe conditions for entry. Layer 2: The offshore zone includes US waters inside the 200 mile exclusive economic zone but beyond the 12-mile territorial sea. Ship in this zone bound for US ports are required to provide Advanced Notice of Arrival of at least 96 hours prior to entering a US port. Layer 3: The coastal zone includes US waters that extend inward from the 12 mile territorial sea to the docks and piers of a US port. In this zone, high-interest vessels may be escorted into port by armed Sea Marshals on board. Layer 4: The dockside zone is the port itself (Pinto, Rabadi and Talley, 2008: 226).

Transportation Worker Identification Credential		Known Shipper Database
Automated Targeting Systems		Nationwide Automatic Identification System
		Domestic Maritime Security Regulations
		Strategy to Enhance International Supply Chain Security
		Corporate Security Review (CSR)
		REAL ID Act
		Security and Response Operations
		FLETC Training of Roadside Enforcement Officers
		ICE International Affairs & Trade Relations

Source: Adapted and regrouped according to the related sectors from Strategy to Enhance International Supply Chain, 2007: 14-15
Note: The list is not exhaustive for all the US initiatives. Among the main ones drawn the global attention are the C-TPAT, CSI and Megaport Initiative.

Notably, both the CSI and C-TPAT are voluntary in nature but have created a massive impact to those countries that have a high volume of trade with the US. Both these initiatives are meant to enhance the US maritime security by securing the interconnected global supply chain. The C-TPAT, announced in 2001, is formed as a joint government-business partnership in which businesses play an active role in enhancing the security measures in the parts of supply chain that they represent. It is designed to strengthen the overall supply chain and the border security by working in close cooperation with the key members of the supply chain. Initially the programme focused on large US importers and exporters, ports/terminal operators and carriers. The measure began with only seven major importers and other participants were added subsequently. As of 2008 it had 12 different categories of participants such as importers, manufactures, Customs brokers, terminal operators and so on (Jim, 2008: 17). Data shows that by January 2012, C-TPAT had 10,082 members with largest portion of members are importers with 4,401 certified followed by 2,827 carriers and 1,109 foreign manufactures (Supply Chain Asia, 16 January 2012). This programme effectively provides incentives for the shippers with reduced number of cargo examination and speedier customs clearance.

On the other hand, the CSI was implemented in 2002 aiming at securing the maritime link by identifying high-risk containers through pre-screening exercises at the world's

twenty largest ports. It requires that the vessel carrier sends to the US Customs and Border Protection (CBP) the manifest of every container destined for the US, 24 hours before the container is loaded onto the vessel in the foreign port of export (Jim, 2008: 17). One of its goals is to have foreign nations cooperate with the US by allowing the US Customs officials to operate in their ports. Since initiation until 2011 there are 58 foreign ports participating in the CSI accounting for 85% of container traffic bound for the US (Department of Homeland Security, 2011). Worthy to note however, the CSI programme is a good example of the US establishing a framework for international cooperation outside of the existing international institutions and the international regulations. Given the economic interest and port competitiveness, states were willing to accept the US direction in what would have been regarded as an infringement of their sovereignty before 9/11 (Beckman, 2005: 255).

The US port security measures can be seen as a unilateral strategy though with a global dimension. Albeit the US adopted a two pronged approach by having cooperation with the international organisations and bilateral agreements with other states as mentioned above, the trend appears to be more towards unilateralism. According to Dudziak (2003: 3-7), the 9/11 incident effectively helped the U.S administration to reinforce the unilateral policies in the name of security and the right to respond to terrorism without much opposition or greater resistance from the international community. Because of this approach, Baviera (2004: 35) asserts that "It was easy enough to argue that what was bad for the United States was bad for the world, given the important role the United States plays in the world economically and politically, and in international security". Holding to this view President Bush declared that "either you are with us, or you are with the terrorist" (Bavierra, 2004: 36).

Taking the advantage that maritime commerce is interdependent; the US imposed multiple programmes to non-US ports in the name of enhancing security standards and practices both domestically and internationally. This has been achieved through the layered approach as explained earlier where the US border is secured as the last line of defence. What appears to be truth though is that, through various security schemes, the US accrues more benefit without granting any tolerance to other trading partners. Although the intention is noble to safeguard the maritime sector from any

untoward incident, it entails the trading partners to bear the financial cost and other form of supply chain requirement in complying with the condition imposed by the US (Stasinopoulos, 2003 and Khalid, 2008). One such obvious example is the implementation of Security and Accountability For Every (SAFE) Port Act which is a part of the broader framework defined by the MTSA 2002 where the act imposes on 100% scanning for all the inbound containers to the US. In order for the full enforcement to take place, this initiative has been postponed from 2012 to 2014 taking into consideration the financial and technical requirement for both the US and the trading partners (Lloyd's List, 4 December 2009). While the initiative's full enforcement is in the pipe line, the CSI has taken care of the inbound cargoes. The SAFE Port Act has legally endorsed and transposed both the CSI and CTPAT programmes into this Act and sets a condition that scanning should take place regardless of prior risk assessment of each containers. If a container does not pass through this scanning process, it will not be allowed for the US shipment. The difference between the CSI and the SAFE Port Act is that the former is conducted through a bilateral agreement but the latter is a unilateral policy requiring the trading partners to comply with the ruling mandatorily (Pallis and Vaggelas, 2008: 6).

Apart from this, one significant expansion of the US unilateral approach beyond its border is through the establishment of International Port Security Program (IPS) where USCG assesses the effectiveness of port security measures in foreign trading partners. Under this programme, the USCG uses a country's implementation of the ISPS Code as a primary indicator of the effectiveness of such measures. In the process of evaluation, they also promote the effectiveness of the ISPS Code to improve port and vessel security. If a country is found having inferior anti-terrorism measures, the US will impose more stringent rules for vessels arriving from that country's port (Strategy to Enhance International Supply Chain Security, 2007).

Outside a port context, the US initiated the Proliferation Security Initiative (PSI) to establish a coalition of willing partners to respond to the growing challenge posed by proliferation of WMD. The initiative was announced by the Bush administration on 31st May 2003. There were initially sixteen participating countries that formed a coalition in an effort to interdict ships suspected of carrying WMD and missile-related

technologies.[15] As of May 2010, the number of participants has increased to 96 countries representing six continents around the world (U.S Department of State, 2010). Under this programme, the USCG and the Navy are prepared to board vessels in international waters to interdict member states' vessels suspecting of carrying harmful weapons or other weapons of mass destruction for wrongful purpose although such action is considered not in compliance with the UNCLOS (Harrald, 2005: 171). Pressured by influence of the US, the member states agreed to the Interdiction Principles of the PSI. These principles are not legally binding and focused on pre-emptive interdiction, seeking to allow ships, aircraft and vehicles suspected of carrying WMD related materials flowing to or from 'state or non-state actors of proliferation concern' to be detained and searched as soon as they enter member countries' territory, territorial waters or airspace. It will also encourage member countries to deny overflight rights to suspicious aircraft or ground them when they stop to refuel (Shah. 2004: 18).

4.4.2 **Security measures at international level**

Following 9/11 and in response to the United Nations Security Council resolution S/Res/1373 (2001) on threats to international peace and security caused by terrorist acts (United Nations, 2010), the former IMO Secretary-General William A. O'Neil consulted member governments on the need to review measures already adopted by the IMO to combat acts of violence and crime at sea.[16] Thereafter he proposed the adoption of a resolution on the "Review of Measures and Procedures to Prevent Acts of Terrorism which Threaten the Security of Passengers and Crews and the Safety of Ships". This resolution was subsequently adopted as Resolution A.924 at the 22nd IMO Assembly in November 2001 and called for a review of the existing international legal and technical measures to prevent and suppress terrorist acts

[15] The sixteen participating countries are Australia, Canada, Denmark, France, Germany, Italy, Japan, the Netherlands, Poland, Portugal, Singapore, Spain, United Kingdom, US and Turkey. (Shah, 2004:18). However during the first anniversary of the PSI in May 2004, more than 60 states had expressed their intention to join in this programme (Beckman, 2005: 256).

[16] The Security Council, which had unreservedly condemned the 9/11 attacks through resolution 1368 (2001), on 28 September adopted resolution 1373 (2001), which has become a cornerstone in the UN's concept of terrorism and in its anti-terrorist actions. It is a resolution adopted pursuant to Chapter VII of the UN Charter, which contains legally enforceable obligations issued from the UN that can result in the threat of sanctions. This resolution was unanimously adopted by the members of the Security Council. The resolution imposes general obligations on all Member States such as the criminalisation of both terrorism and its financing…(United Nations Security Council, 2007).

against ships at sea and in port and to improve security aboard and ashore. The aim was to reduce risks to passengers, crews and port personnel on board ships, port areas, the vessels and their cargoes, hence to enhance ship and port security from becoming a target of international terrorism (Hesse, 2003: 330).

In response to the adoption of Resolution A.924 (22), the IMO developed a new comprehensive security regime for international shipping and port which entered into force on 1st July 2004 following the adoption by a Diplomatic Conference on Maritime Security held in London from 9 to 13 December 2002 (Hesse, 2003: 330). During this conference, the IMO adopted a series of wide-ranging new security measures along with eleven associated resolutions (IMO, 2009b).

This was done through the amendments to Chapter XI of SOLAS 1974 in which it was divided into two parts: Chapter XI-1: Special Measures to Enhance Maritime Safety; and Chapter XI-2: Special Measures to Enhance Maritime Security. Under Chapter XI-2, the ISPS Code was developed as part of the security measures (Hesse and Charalambous, 2004: 125).

In principle, Chapter XI-2 incorporates new regulations for ship and port facilities requirements though there is no specific definition for 'security' as argued by Mejia (2005:2). This regulation stipulated as Regulation XI-2/2 enshrining the ISPS Code has a mandatory section (part A) and a recommendatory section (part B). The guidance in section B is supplementing the provisions of part A. In essence, the new SOLAS Chapter XI-2 and the ISPS Code take the approach that ensuring the security of ships and port facilities is basically a risk management activity and that to determine what security measures are appropriate, an assessment of the risks must be made in each particular case. The purpose of the ISPS Code is to provide a standardised, consistent framework for evaluating risk, enabling governments to offset changes in threat levels with changes in vulnerability for ship and port facilities (Hesse, 2003: 331-332).

The risk management approach stipulated in the ISPS Code carried through a number of minimum functional security requirements for ships and port facilities. For ships it includes:

(a) ship security plan
(b) ship security officers
(c) company security officers; and
(d) certain onboard equipment.

For port facilities:
(a) port facility security plans; and
(b) port facility security officers.

Other additional requirements for ships and port facilities include:
(a) monitoring and controlling access
(b) monitoring the activities of people and cargo; and
(c) ensuring that security communication are readily available.

Under part A of the Code, Contracting Governments can establish Designated Authorities (DA) within Government to undertake their security responsibilities. In turn the Government or DA may also delegate the undertaking of certain responsibilities to Recognised Security Organisations (RSO) outside Governments. In addition to this, the Code also requires the Contracting Governments to set up the security level for international use to their ships and port facilities. The three levels are:

(a) Security Level 1: normal
(b) Security Level 2: lasting for the period of time when there is a heightened risk of a security incident; and
(c) Security Level 3: lasting for the period of time when there is the probable or imminent risk of a security incident (Trelawny, n.d: 3 – 4).

In summary, the whole Code adopts the objectives of: "(1) the detection of security threats, (2) the implementation of security measures, (3) the collation and promulgation of information related to maritime security, (4) the provision of reliable methodologies in assessing maritime security risks, (5) the development of detailed security plans and procedures for reacting to a change in security level, and (6) the establishment of security-related roles and responsibilities by contracting governments (and their administrations), shipping companies and port operators at

national and international levels, including the provision of professional training" (Ng and Vaggelas, 2012: 677).

One significant setback of the ISPS Code is that it does not apply to *inter alia* either fishing vessels or pleasure craft or cargo ships below 500 gross tonnage or to the ports which serve them (Bazan et al, 2007: 3), but covers passenger ships and cargos of 500 gross tonnage and upwards, including high speed craft, mobile offshore drilling units and port facilities serving such ships engaged on international voyages (IMO, 2009b).

In addition to the formation of Chapter XI-2, other pertinent amendments to 1974 SOLAS Convention were:

(i) Modification to Chapter V (Safety of Navigation) accelerating the implementation of the requirement to fit Automatic Identification Systems (AIS). Ships other than passenger ships and tankers, of 300 gross tonnage and upwards but less than 50,000 gross tonnage are required to fit this system.

(ii) Modification to Chapter XI-1 – Regulation XI-3 requires Ships' Identification numbers to be permanently marked in visible place whether on the ship's hull or superstructure.

(iii) Regulation XI-5 requires ships to be issued with a Continuous Synopsis Record (CSR) which is intended to provide an on-board record of the history of the ship.

(iv) Regulation XI-2/6 requires all ships to be provided with a ship security alert system. The main function of this system, when activated it shall initiate and transmit a ship-to-shore security alert to an authority, identifying the ship, its location and indicating that security of the ship is under threat or it has been compromised. (IMO, 2010)

Interestingly though, the amendments to SOLAS 1974 were conducted on a fast track basis through "tacit acceptance procedure" in order to give immediate effect to the contracting parties. As noted above, both the measures and the speed with which they were introduced were in response to the US requests for swift action as Fairly (17 February 2011: 5) succinctly explained "with extreme urging from the United States, the normally very deliberative IMO was able to move quickly, passing the ISPS in 15 months".

Furthermore the ISPS Code specifically, marks a deviation from the rule making norm of the IMO instruments from merely addressing ships to include port facilities as well, an area that had previously been considered a matter within the domestic

jurisdiction of the port states because of their territorial sovereignty (Beckman, 2005: 252 and Mejia, 2009: 2). In a broader sense, the impact of 9/11 has brought a paradigm shift in the role of IMO in dealing with maritime matters from merely focusing on "Safer Shipping and Cleaner Oceans" to "Safe, Secure and Efficient Shipping on Clean Oceans". The reformation towards security matters by the IMO reflects its broader and deeper concern in providing a blueprint for better action in the future (IMO, 2010) which eventually brought a change of attitude in the international maritime players with the involvement and co-operation of other international organisations alike such as ILO, WCO and International Organization for Standardization (ISO) without denying that the influence of US either directly or indirectly through these organizations is equally important.

In addition to the ISPS Code, the Code of Practice on Security in Ports was developed collectively by the IMO and ILO.[17] The guidelines provided in this Code cover a more defined framework for a number of issues around port security. The risk assessment part is given a special attention in this Code. The full methodology suggested here obviously go beyond the ISPS Code requirements (Schroder et al, n.d.). This was followed by several other subsequent initiatives such as the ISO Standards like ISO 20858 (guidelines on maritime port facility security assessment, demanding that the relevant port authority develop a port facility security plan and ensure its application in the case of the critical port facility assets), ISO 28000 (guidelines on security management supply chains) and ISO 28001 (specifications on

[17] *The Code of Practice on security in ports* has been undertaken by IMO jointly with ILO. This combined initiative complements the provisions of the ISPS Code with respect to security of the wider port area was approved by the Governing body of the ILO of its 289th Session in march 2004 and later the IMO Maritime Safety Committee (MSC) of its 78th Session in May 2004. This code of practice is not legally binding instrument and is not intended to replace national laws and regulations. It is not intended to affect the fundamental principles and rights of workers provided by the ILO instruments, or the facilitation of the access of workers' organizations to ports, terminals and vessels. This Code provides a framework of guidelines for the development of a strategy appropriate to identifying threats to security in ports that as outlined in SOLAS Chapter XI-2 and the ISPS Code (Security in port: ILO and IMO code of practice, 2004:,v-vii). Among the main provisions of this code are:

- The development of a ports' security policy statement by the signatory
- The establishment of a Port Security Assessment;
- The identification and evaluation of the critical assets and infrastructures that are important to protect;
- The development of a Port Security Plan, compatible with the ISPS Code for a Port Facility Security Plan;
- The increased security awareness of personnel training (Pallis and Vaggelas, 2007:4).

best practices for implementing supply-chain security), Revised Seafarer's Identity Documents by ILO and the SAFE Framework of Standards to Secure and Facilitate Global Trade by WCO (Pallis and Vaggelas, 2008: 3 and Boske, 2006).

To enhance the development of standards for safety and security in the wider field of transportation, the IMO and WCO signed a Memorandum of Understanding (MoU) in July 2002 to strengthen cooperation in the fields of container examination, integrity of the multi modal transport chain and matters relating to the ship/port interface. This agreement was a result of the IMO Resolution A.942 (22) where the resolution seeks additional support of other international organisation addressing the security issues. As such, the WCO was identified as the relevant agency in improving the integrity and security of Cargo Transport Units in multi modal transport (Allan, 2003).

4.4.3 **Security measures at supra-national level**

In response to the measures adopted at the IMO and probably also under the influence or pressure of the US, the EU reacted in parallel to safeguard its 27 member states by formulating its own comprehensive regional regulatory framework aiming to secure its 9,500 flagged vessels (over 500 gross tonnage), 4,300 maritime companies and 1,250 ports over 4,100 port facilities within this member groups (Pallis and Vaggelas, 2008: 4-9). Although coincidentally the European Commission had published a White Paper detailing the EU transport policy up to 2010 just one day before 9/11 as stated in Chapter Three, its emphasis was more on security of passengers onboard cruise vessels and ferries as well as on the transportation of nuclear goods.

The EU's actual security initiative to protect the port and shipping facilities was covered in the Regulation 725/2004 by transposing the ISPS Code into EU Community legislation. The measure was brought into force on 31 March 2004. To reinforce the effect of the Code, the Regulation includes provisions that extend these measures to the ships engaged in national voyages within the EU as well as the related port facilities that serve them. The regulation expanded for the list of ships to include Class A passenger ships effective 1st July 2005 and other domestic ships effective 1st July 2007. Additionally, the Regulation which was transposed into the EC law made a mandatory part A of the ISPS Code and some aspects of the Part B compulsory for inner EU traffic (Anyanove, 2007: 26).

The EU policy was further strengthened with the Directive 65/2005 that came into force in 2007. This Directive applied to a much wider scope in port area apart from 'ship/port' interface as spelled out in Regulation 725/2004 and applies to every port located in the territory of Member States (Pallis and Vaggelas, 2008: 10). The purpose of this Directive is to cover the remaining uncovered part in both international rules and European legislation. However it is noted that the Directive gives freedom to its member states in terms of implementation according to their own accord because of the heterogeneous nature of their ports (Anyanova, 2007: 26). In view of the nature of ports and financial requirement, a study conducted by Dekker and Stevens (2007) reveals that as of 1st January 2004, in accordance with the Regulation 725/2004, the EU ports on average only managed to comply with the ISPS Code approximately by 70% with the average investment cost per facility about Euro 464,000 and the average running cost about Euro 234,000. This shows that there were many factors drawn to EU's consideration particularly the financial aspect during the implementation of this Code.

The EU also implemented Revised Customs Code similar to the US C-TPAT as a framework to minimise security risks throughout the entire supply chain. Under this measure, the transport operator would be granted Authorized Economic Operator (AEO) status when it fulfilled all the necessary requirements.[18] Upon achieved this status, the operator is granted peer recognition of AEO status among the member countries, reduced inspections, relaxed standards for pre-arrival and pre-departure requirements and simplified procedures for customs declarations (Boske, 2006: 67 and Pallis and Vaggelas, 2008: 12).

[18] Authorized Economic Operator (AEO) is a party involved in the international movement of goods in whatever function that has been approved by or on behalf of a national Customs administration in accordance with the WCO or equivalent to supply chain security standards. AEO include *inter alia* manufacturers, importers, exporters, brokers, carriers, consolidators, intermediaries, ports, airports, terminal operators, integrated operators, warehouses, distributors. AEO was established under the WCO's SAFE Framework of Standard to secure and facilitate global trade known as SAFE Framework. The framework is meant to improve the security of international trade supply chain in a uniform and holistic way. The framework encourages and makes it easier for buyers and sellers to move goods between countries securely. It sets the principle and standards for its 171 member countries to follow and proposed to conduct through twin pillars of Customs-to-Customs network arrangement and Customs-to-Business partnership. Those players who obtained AEO status will reap benefit such as faster processing of goods by Customs through reduced examination rates (World Customs Organization, 2010).

In another supra national spectrum, members of ASEAN signed the ASEAN Plan of Action to Combat Transnational Crime in 2001. The ASEAN Regional Forum (ARF), an informal multilateral dialogue between the ASEAN and other Asia Pacific regional members, issued a Statement on Cooperation Against Piracy and Other Threat to Security in June 2003 (ASEAN Regional Forum, 2010). Essentially its measures are more directed at combating piracy and terrorism at sea than anything directly related to ports. The framework is merely implemented by voluntary participation among member states and not binding in nature. Nevertheless, ASEAN forged some form of cooperation among its member states in implementing the ISPS Code in their respective ports. The practical mechanism of their approach is explained in Chapter Seven.

In another instance, the Asia Pacific Economic Cooperation (APEC) has made the only effort in addressing the maritime security through Security Trade in the APEC Region programme (STAR Programme). The programme was initiated by the US which is a member country of this organisation with the aim to standardise the practice of the ISPS Code in the regional security measures by requiring all member countries to submit a Counter Terrorism Action Plan (CTAP). The plan provides a concise checklist of counter-terrorism measures undertaken by the member states. Apart from this, the STAR program also included other wider measures by promoting cyber security, energy security and protecting the health of communities in addition to secure trade and halting terrorist financing (Ng and Gujar, 2008: 261).

4.4.4 **Other national initiatives**

Driven by the US regulations and subsequently required by the international regime, some of the programmes developed by other governments mirror the US initiatives while a few others establish their own unique approach. Examples include the Canadian Government's Partnership in Protection programme, a reflection of the C-TPAT programme (Brooks and Pelot: 2008: 206) and the Swedish Stair-sec is another one. The Australian government established the Australian Maritime Identification System in order to identify vessels while they are still 1,000 nautical miles away from the coast (Klein, 2006: 1). On the other hand, New Zealand worked closely with the US and developed a robust procedure for screening of shipments to US ports through a Supply Chain Security arrangement. The procedure is considered one of the first in

the world which involves using risk assessment and intelligence to identify high-risk shipments. They also introduced a voluntary scheme called the Secure Export Partnership Scheme in which businesses undertaking security measures get the special privilege of their shipments being classified as secure (Klein, Mossop and Rothwell, 2010: 58). The UK basically complies with the regulation and directive set by the EU which is applicable to all member states at the supra national levels.

Canada, in response to 9/11 also undertook initiatives to enhance the border security with the US that went beyond the port and shipping sectors need. The government realised that after this major incident, the vulnerability of the US-Canada became very obvious. Therefore one such programme introduced between the two countries was the Smart Border Declaration (SBD) in December 2001. A study conducted by Carpentier (2007) reveals that the Canadian government took affirmative actions in response to threat to its national security and forged a bilateral relationship with the US. This programme was organised through changes to national security policy. The programme was designed to provide a secure flow of people, goods, infrastructure and information sharing. Further, the Free and Secure Trade Program, a transborder security initiative was established by tying the US and Mexico together for increasing the integrity of the supply chain (Canada Border Services Agency, 2010). Although this is not directly a maritime related regime, it has been incorporated into SBD to enable free and safe flow of goods and common clearance. This programme is similar to C-TPAT but only involves key players comprised of carrier, drivers, importers and southern border manufactures.

4.5 **Conclusion**

This chapter has discussed the contributing factors and its consequences of changed attitude as well as practices regarding port security. Ports occupy a unique position in the total maritime transportation system. In this juncture, it is worthy noting that the subject of port security contains a range of issues at various spatial levels chiefly for the reason of safeguarding ports for dual objectives. First, to sustain the core function of the port in trade facilitation for national and global economic prosperity by complying the required regulations and second, the port has to be protected from any casualties involving loss of lives or damage to physical property. For the purpose of national economy and defence, both objectives are intertwined and mutually

supporting each other. In realising this fact, the international maritime community took every possible effort in introducing regulations and practices and in implementing numerous counter-measures at different spatial levels with some of the measures introduced with the US backing.

This chapter reveals that in the wake of 9/11, a raft of security regimes have been introduced and imposed to the maritime sector in the name of countering terrorism. Appendix V summarises the extent of these. Security matters have been perceived very differently in the post 9/11 era. The maritime sector is regarded as 'soft' and vulnerable to many forms of malicious attack. Furthermore, the relatively open nature of seaports, even allowing for the introduction of the security measures discussed, seemingly provides an attractive alternative for terrorists to attract global attention through their actions.

One important factor that has brought a change in attitude and practice to port security in international dimension was driven by the significant role played by the US. In realising the potential danger of terrorism, the US imposed firm measures to its trading partners by making its border as the last line of defence. Those countries are obliged to comply in order to carry out trade smoothly in US ports. Failing this, ships from these countries will encounter rigours inspections even before entering the US ports. Additionally, as a super power and with a greater influence in the international organisations, the US has played its card well in pushing its security agenda through those bodies to other parts of the world, as otherwise would be regarded as infringement of sovereignty in normal circumstances. In this sense, though most of the US measures are meant for its national interest, their effects are global in nature. At the international level, the IMO introduced the ISPS Code in a fast track manner as a key instrument in protecting the port and shipping sector. Additionally, other international organisations such as the ILO, WCO and ISO added up more security regimes to the whole supply chain in the maritime sector. At the supra-national level, the regional groupings introduced various other measures along with the international and US requirements. All these security regimes reflect the fact that the post 9/11 period created anxiety, especially for the West that the port sector is very vulnerable to easy attack therefore a risk-based approach is needed for its protection.

Having seen a broad spectrum of security measures at different spatial levels, the following chapter provides a holistic view of Malaysia's maritime sector including the ports. Chapters Three and Four provided a global dimension which will help to view and comprehend how those measures were then translated or practised in the national context. Before elaborating further on the Malaysian port security system before and after 9/11, the next chapter essentially establishes a background setting in order to comprehend Malaysia's port system and security policies which are explained in detail in the subsequent chapters.

CHAPTER FIVE

MALAYSIA : A MARITIME NATION

5.1 Introduction

Malaysia is one of the fastest and most powerfully growing nations in the SEA region. As a member of ASEAN, Malaysia's role in regional development, especially in the maritime sector, in securing and safeguarding the surrounding waters by various means has received recognition and cooperation not only from the regional members but also from other states around the world. By setting an aspiration to become a developed nation by year 2020, the importance of the maritime sector especially the development of the port industry is not overlooked in the national development plan.[19] Malaysia's position as an oceanic state closely situated next to major waterways that connect Asia with the west coast of the US and with the Middle East and Europe as illustrated in Map 5.1 and 5.2 below, creates a situation where Malaysia faces many challenges in keeping her waters safe from any unlawful activities as well as in maintaining its economic prosperity. Against this backdrop, it is the objective of this chapter to analyse the importance of maritime sector which consists of many different sub-sectors and in particular, the contribution of ports to the Malaysian economy. In line with this, a historical overview will be presented as a background for understanding Malaysia's intention in enhancing the country's status as a maritime nation in this region. This will then be followed by a discussion of some important issues concerning various sub-sectors and subsequently the port policy and port development in the country.

[19] Malaysia has set an agenda to be a developed nation by the year 2020. This agenda which is known as 'Vision 2020' was mooted by the fourth Prime Minister of Malaysia, Tun Dr. Mahathir Mohammad. The key to the attainment of a fully developed nation as envisaged in 'Vision 2020' is overcoming the nine strategic challenges; namely
(i) Establishing a united Malaysian nation made up of one *Bangsa Malaysia'*
(ii) Creating a psychologically liberated, secure and developed Malaysian society
(iii) Fostering and developing a mature, democratic society
(vi) Establishing a fully moral and ethical society
(v) Establishing a mature, liberal and tolerant society
(vi) Establishing a scientific and progressive society
(vii) Establishing a fully caring society
(viii) Ensuring an economically just society, in which there is a fair and equitable distribution of the wealth of the nation; and
(ix)Establishing a prosperous society with an economy that is fully competitive, dynamic, robust and resilient (Okposin, Hamid and Boon, 2005: 46).

5.2 **The Malaysian economy**

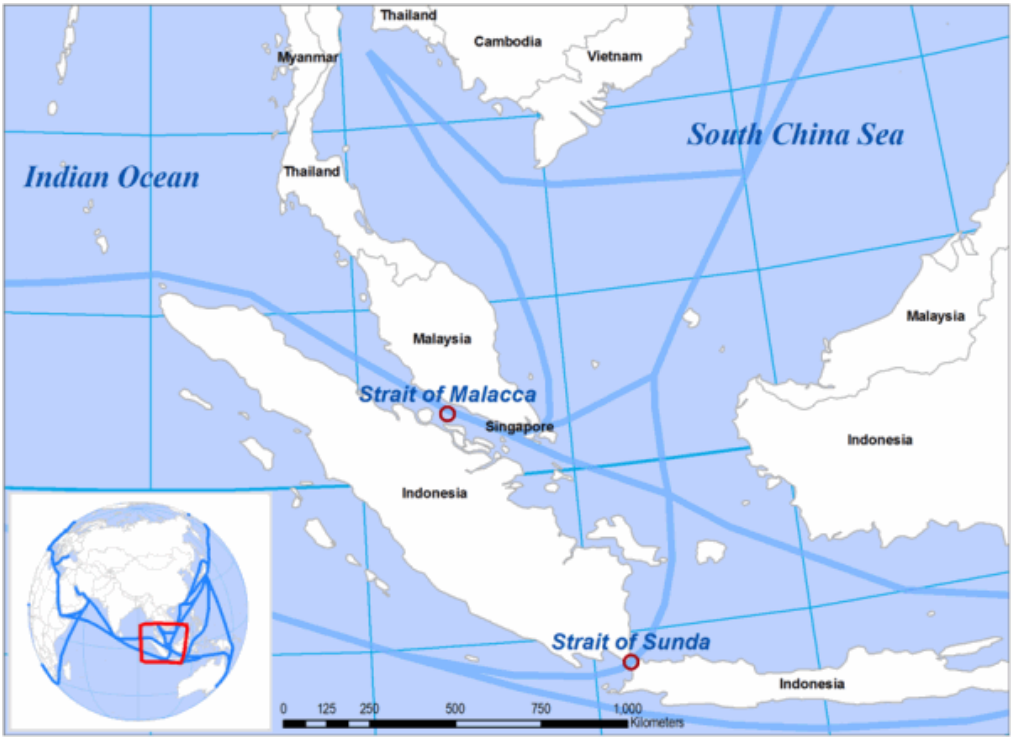
The Malaysian economy is essentially ocean dependent with more than 90% of its exports seaborne (Seventh Malaysia Plan, 1990: 319). In this sense, the importance of ports and shipping cannot be overstated. Malaysia's progressive growth in merchandise trade as will be discussed later in this chapter, placed the country as the 20th largest trading nations in the world in 2009, with a share of approximately 1.4% of global trade (Khalid, Ang and Joni, 2009: 16). Apart from this, Malaysia is also heavily ocean dependent for various resources, communication, commerce and security (Ahmad, 1988: 3-5). Interestingly though, Malaysia is geographically an agro-based economy with an abundance of natural resources and the nation is rapidly transforming into a growing industrial country.

This development can be divided into three main broad stages that is (i) economic status during independence, (ii) economic status during the 1960s to 1980s; and (iii) economic status since the 1990s. In the first stage, the economy was dominated by the primary sector consisting of agriculture and mining. The second stage of the economic progress witnessed an economy heavily dependent on manufacturing which evolved through two strategies: import substitution and export promotion. This was pursued through the First Malaysia Plan (1966-1970) and Second Malaysia Plan (1971-1975) respectively. However fundamental changes in the pattern of industrialisation resulted from the implementation of two core strategies in two main plans and policies, that is the First Outline Perspective Plan 1971 to 1990 (OPP1) and the Second Outline Perspective Plan (OPP2) covering the period from 1991 to 2000. OPP1 covers the Second to Fifth Malaysian Plan whereas OPP2 covers the Sixth and Seventh Malaysia Plan. OPP1 has been the main foundation on which the past and the present industrial success have been built on. The main thrust of the subsequent OPP2 has been a follow up industrialisation strategy (Okposin, Hamid and Boon, 2005: 47-52). The current economic progress with focus on the industrial activities was therefore achieved through the adoption and intensification of both the First and the Second Industrial Master Plan in 1985 and 1996 respectively (Okposin, Hamid and Boon, 2005: 23-28).

During the tenure of Tun Dr. Mahathir Mohamad, fourth Prime Minister of Malaysia, the export-oriented industrialisation strategy was implemented successfully through

the Malaysia Incorporated policy introduced in 1983 as the fundamental basis for national development. This also assisted the process of developing the marine sector particularly ports. This policy, coupled with the Industrial Master Plan, contributed significantly by attracting transnational corporations (TNCs) which brought foreign direct investment to Malaysia and hence boosted further economic prosperity. According to Mak and Tai (2001: 204), during the period 1981 to 1992, TNCs accounted for 82% of the total Malaysian exports. Malaysia's ability to take a higher leap which transformed and diversified the country from a merely agro- based to an industrial based country is due to the various strategic plans and a vision (Okposin, Hamid and Boon, 2005: 23). With the forward-looking 'Vision 2020', Malaysia has committed itself to face challenges to achieve that dream. In actual fact, Malaysia's ambitious vision serves as a basic template against which the performance of all sectors of the Malaysian economy should be judged, also including the marine sector (Saharuddin, 2001: 2). In this context, the maritime sector is a key component that needs greater attention if it is to achieve the prescribed agenda.

Map 5.1: The Strait of Malacca



Source: Rodrigue, 2009

Map 5.2: Shipping Lanes and Passages in Pacific Asia

Source: Rodrigue, 2009

5.3 Historical background and the importance of maritime sector in Malaysia

5.3.1 Early history

Map 5.1 demonstrates that Malaysia is well positioned in SEA by having strategic trade routes for the East and West. Surrounded by the oceans, the country is well connected to the west of the US, the Middle East and Europe. The natural geographical location and the vast coastline are contributing factors for the Malaysian government to set an agenda to become a leading maritime nation in this region. Generally, Malaysia has about 4,490 kilometres of coastline. The maritime zone it has is larger than the combined landmasses of Peninsular Malaysia (West Malaysia) and Sabah and Sarawak (East Malaysia), a total of 623,907 square kilometres (Saharuddin, 2001: 427-428). Within this maritime zone, Malaysia also claims sovereignty over 878 islands and 510 other geographical features such as offshore rocks, shoals, reefs, ridges, patches and grooves (Gunasekaran, 2011: 20).

Apart from the vast natural coastline, Malaysia's strong position in the maritime sector and its urge to become a leading maritime nation should also be viewed against her long historical background. It was not just the current political or economic

factors that encouraged the development of the maritime industry including the port sector, the early economic history was one of the contributing, or rather inducing motives for re-establishing the past glory. Therefore it is worth looking generally at Malaysian maritime development, particularly the port sector in this context in order to comprehend its importance from a historical perspective.

Before independence in 1957, Malaysia was known as Malaya.[20] In the early era of the 4th – 12th century, Kedah, located in the northern part of Peninsular, was the first place used as an entrepot, an intermediary centre of trade and transhipment, by the Indian and Chinese traders who were plying the Malacca Straits. During this period, Kedah was not just a place for trading activities but also a place for settlement by large Indian traders (Tregonnning, 1964). The emergence of several empires during this era, especially the Funan, Srivijaya, Sailendras and Majapahit that had great influence in the SEA and in their quest for spreading powers around the neighbouring countries made the political situation apparently unstable and severely affected the trading pattern in this region. Thus Kedah could not sustain herself as a main trading centre for a long time. When Malacca was found in the early 13th century by a Hindu king known as Parameswara from Sumatra, the place was well developed and built into a main entrepot replacing Kedah.

Geographically well positioned in the SOM and facing a good climatic monsoon season, Malacca was found to be more conducive environment for trading by the Indian and Chinese traders. The port was turned into a focal point for ships sailing from two different directions following the monsoon winds blowing across the Indian Ocean and South China Sea at two different times of the year. Its suitable location and commercial viability were not just restricted to the Indian and the Chinese traders but were well received by the regional traders as well as traders from the Middle East. Malacca port was entirely transformed into a transhipment hub through the active trading during this period (Ryan, 1969: 10-15). Gradually the Malacca port entered into a different phase of development. From a main trading centre it also became the diffusion centre for spreading the Islamic religion. The traders from the Middle East

[20] In 1963, the name Malaya was changed to Malaysia by forming together the Federation of Malaya (consisting eleven states) Sabah, Sarawak, Brunei (in Borneo Island) and Singapore, However both Brunei and Singapore refused to join in this formation and thus opted out due to political and various other related factors. They stand as single independent countries respectively.

played a prominent role in bringing this religion and subsequently established their cultures here. Eventually many settled down and transformed the Malacca port into a centre of Islamic civilisation. During this period, Malacca port was not just used for the maritime activities, but was developed into a port city and became a fortress for the kingdom of Malacca sultanate. Interestingly though, the socio-cultural and socio-economic interactions did not seem to happen just in Malacca but as Palmer (1999: 100) argued, historically it happened in most parts of the world where the port was treated as a centre of interaction among the different political, economical and cultural entities and turned into a source of national wealth and pride. This consequently stimulated the development of port cities. In Malacca's case, the strength of ports created enormous wealth and pride to the rulers and helped them build a well known empire during this era.

The arrival of European powers to Malacca in the 14th century initiated first by the Portuguese was a turning point for the downfall of Malacca supremacy in the maritime field. The Portuguese destroyed the status of Malacca as a main transhipment port when they captured it for the purpose to gain control over the spice trade and built their own fortress. Subsequent to foreign arrival, the political and economic situation became unstable in this region (Hussin, 2008: 9-13).

The emergence of the Renaissance in Europe during the 14th century particularly, was considered to be the watershed and pushing factor for the Europeans to quest for New World trade and simultaneously spread the Christianity. Their vast knowledge in the maritime field opened the door for further exploration and eventually brought them to the East and established their hegemony through imperialism or colonialism (Love, 2006: 7-8). This was how the Portuguese arrived in Malacca and gained control from 1511 to 1641, followed by the Dutch from 1641 to 1824 and the British from 1824 to 1957 (Hussin, 2008: 16). In addition to these maritime powers, the Spanish and French too had spread their colonialism to various parts of SEA in different periods of time (Hattendorf, 1996).

Upon the colonial arrival, Malacca's transhipment status declined quite considerably. The conquest of Malacca by the Portuguese in the 14th century and their monopolistic policy as well as imposition of heavy levies for the traders using the Malacca port had led to the port losing its status as a main trading centre. This caused the trading point

later to transfer to Johor (Southern state of Peninsular Malaya). Nevertheless, Johor could not retain its strategic port for too long. After the defeat of Portuguese by the Dutch in 1641, the maritime centre was shifted to Batavia, Indonesia for the interest of the Dutch and Malacca was merely made as an administrative office.

The explanation of maritime historical facts thus far provided a broad picture that has connection to Malaysia's interest and progress in the maritime sector. In fact, the influence of colonial powers especially the British had a significant role in port development particularly the development of the Port Klang which will be explained in detail in the next chapter. However, at this stage, the following section expands further the development of maritime sector in different sub-sectors.

5.3.2 **An overview of the maritime sector**

As mentioned earlier the importance of the maritime sector is increasingly acknowledged and recognised by the Malaysian government for several reasons. One such reason is that the maritime domain provides the footing for the growth and development of various marine-related industries. The primary maritime sectors that contribute significantly to the Malaysia economy can be outlined briefly as follows with two selected sectors (shipping and ports) to be discussed in detail later in the chapter (Saharuddin, 2001: 428-429 and Rahman, Janib and Wei, 1997: 5-18 and Naidu, 1997: 51).

(i) *Ocean and coastal shipping*

The shipping sector in Malaysia is divided into two components, ocean going shipping and coastal shipping. Ocean going shipping comprises of bulk carriers, chemical tankers, container ships and LNG carries. In this category, Malaysia established her own ocean fleet company called the Malaysia International Shipping Corporation (MISC) in 1968. On the other hand, the coastal shipping sector includes a large number of smaller fishing boats, landing crafts, pleasure boats, barges and harbour crafts. To handle the domestic shipping, the government has setup Domestic Shipping and Licensing Board (DSLB) under the purview of MOT. (Further discussion of Malaysia's shipping follows below).

(ii) *Barter trade*

Barter trade is another component that contributes to domestic maritime growth. A survey carried out in the first half of 2008 indicates that there are about 2,000 barter trade boats entering and leaving the Peninsular Malaysia followed by 1,500 ferry boats transporting 4.8 million passengers (Sun2Surf, 2009). The number is more prominent in the Brunei, Indonesia, Malaysia, Philippines East ASEAN Growth Area (BIMP-EAGA) region. A study conducted by a private consultant in 2010 reveals that non-conventional vessels (NCV), vessels below 500 gross tonnage including the traditional wooden-hulled and fishing vessel, have been highly used for barter trading activities and they are not regulated effectively within this region. In Malaysia's case, various ports in Sabah (East Malaysia) have become the centre for barter trading activities mostly by NCVs from Indonesia and southern Philippines (Mak, 2010: 10-11).

(iii) *Shipbuilding and ship repairing*

This sector is considered a fairly a new development based on the government's Industrial Master Plan. There are about 65 shipyards and repair facilities established in Malaysia . It is anticipated that with the growing number of shipping services vis-à-vis with country's seaborne trade, this sector will play an important role in providing maritime services (Saharuddin, 2001: 428). As such, the industry is one of the key contributors to Malaysia's economy, generating RM7.05 billion of revenues and employed 20,000 people at the shipyards and in associated activities in 2011 (The Star Online, 8 October 2012).

(iv) *Port services*

As a consequence of trade expansion and changes in policy to cater for the industrial based activities, the local ports role in facilitating the growing trade becomes vitally important. This trend picked up during the mid-80s where there was a four fold increase in the total cargo traffic, with Port Klang being the leading port handling a quarter of the nation's trade volume. More details of Malaysian ports will be discussed later in this chapter and matters concerning Port Klang in the following chapter.

(v) *Offshore oil and gas*

Malaysian economy is considerably supported by the offshore gas and oil industry which contributes a substantial amount of revenue to the government. Realising the abundance of oil and natural gas available in the offshore, the government incorporated the oil company Petroleum National Berhad (PETRONAS) in 1974 to explore the full potential of these natural resources. It is estimated, oil and gas reserves will last about 17 and 100 years respectively (Saharuddin, 2001: 429). The income from the oil and gas industry has contributed substantially to the growth and development of the economy. For example, the government's revenue derived from the industry amounted to RM8.8 billion (USD2.84 billion) in 1990 and within two decades, the amount rose to RM30 billion (USD9.8 billion) in 2010 and RM30 billion (USD9.8 billion) again in 2011 (Rahman, Janib and Wei, 1997: 8 and Anggaran Hasil Kerajaan Persekutuan Tahun 2011 and 2012: 13).[21]

(vi) *Inshore and offshore fisheries*

Strategically surrounded by waters, this sector potentially provides a good source of income for the national economy growth and also additionally vast employment opportunities because of broad activities in this industry. The industry's activities are divided into three components consisting of marine fisheries, aquaculture and inshore fishing. With the combination of these three components, the total fish production for the year 2008, 2009 and 2010 was 1.64 million, 1.71 million and 1.81 million metric tonnes respectively. In the year 2010, the fisheries sector contributed 1.3% to the national GDP (Annual Fisheries Statistic, 2010: 22-36).

(vii) *Recreation centres and marine tourism*

Having an extensive coastal area, both east and west coasts provide the best tourism centres and attract tourists from around the world. The well-known tourist attractions include Langkawi Island, Penang, Pangkor, Besut, Sipadan Island and there are many more. Maritime tourism is fast growing with great potentials and has gained popularity both domestically and internationally, especially in the growth of cruise shipping. Additionally, Basiron (1997) points out that the joint contribution of government and private sector in developing major resorts, hotels, small cottage or

[21] Based on January 2012 currency exchange rate: RM 1 = USD 0.32
USD 1 = RM 3.10

village level industries significantly developed marine tourism. Activities such as sports fishing, yachting, boating and sailing, scuba diving and ecotourism are gaining greater importance.

(viii) *Naval defence and other maritime enforcement agencies*

This type of industry is categorised as a public good rather than part of the economy. Its contribution is viewed on the basis of its primary role in providing coastal defence and maritime security. There are eleven agencies involved apart from the naval forces in safeguarding the Malaysian waters with a total manpower of 5,300 people and 486 ships and boats in various sizes and capacities. The government allocates approximately RM3 billion annually for the operation of these agencies. One of the prime agencies is the Malaysian Maritime Enforcement Agency (MMEA) that subsequently merged the enforcement function of all other eleven agencies under one roof (Annual Report of MMEA, 2009: 11).

Among those listed industries above, port services act as a backbone for the national economy. For safeguarding the port services through security measures, the role of maritime enforcement agencies such as the MMEA is extremely crucial. As naval forces focus on defence through military system, the enforcement agencies, together with the Marine Department which bears the responsibility as the Designated Authority (DA) in implementing the ISPS Code, play various pertinent roles in matters of port security. There are several key stakeholders in this respect and their role will be elaborated in the succeeding chapter.

At this juncture, it is worth noting that during the OPP2, the New Development Policy (NDP) was formulated to oversee the overall development of maritime sector and accordingly laid out some strategies over this plan period (Rahman, Janib and Wei, 1997: 73). For this purpose, the government outlined three fundamental objectives in the Seventh Malaysia Plan (1996-2000) that became part of the OPP2 (Saharuddin (2001: 428):

(i) A global approach to industrialization allowing firms to venture into large-scale operations to gain economies of scale by exporting to world markets;

(ii) Maintaining and enhancing competitiveness in the face of changing market preferences that require reinforcing the nation's competitive foundation and strengthening infrastructure; and

(iii) Developing a modern, dynamic and outward oriented services sector to become a major catalyst for growth and a potential for export of services in international trade.

Furthermore, to ensure that the maritime sector continues to prosper and is well managed, the government has formulated a host of legal frameworks for fourteen different marine related sectors which include port and shipping. For this reason there are at least seventy-four national laws formulated and additionally thirty-five to forty subsidiary legislative instruments and by-laws brought into force (Saharuddin 2001, 429). At the international level, Malaysia has ratified twenty-one UN Conventions and seventeen IMO Conventions. In relation to port security, Malaysia has ratified the SOLAS 1974 since 19 January 1984 (Khalid and Kaur, 2011: 25) which, as we have seen in the previous chapter, became the basis for the formation of the ISPS Code. Beyond this, as a member of the UN, Malaysia was also obliged to initiate a preventive measure when Resolution 1540 was adopted by the UN on 28 April 2004 on non-proliferation of WMD. Member States were required to establish domestic controls to prevent the proliferation of nuclear, chemical or biological weapons and their means of delivery including by establishing appropriate controls over related materials (Jaafar, 2011: 7).

5.4 **An overview of the shipping sector**

Malaysia not only has a range of ports scattered throughout the country but also has a significant number of ships registered under the national flag. This puts Malaysia ranked in the nineteenth place among the top global thirty-five maritime countries in 2011 shown in Table 5.1 below. This sector is equally important as the port sector in promoting and facilitating trade. As Stopford (2003: 3) asserts, shipping is a catalyst for economic development, which as the cheapest source of transportation opens up the market to specialization, in a similar understanding the Malaysian government established the MISC in 1968 and a second national line, Perbadanan National Shipping Lines in 1982 to assist in developing a balanced and diversified fleet as well as achieving a better position in international trade. To further boost the shipping sector, under the Seventh Malaysia Plan, the government earmarked RM1.1 billion (USD355 million) Shipping Fund comprising the Shipping Venture Facility of RM500 million (USD161 million) and Shipping Finance Facility of RM600 million (USD194 million) (Seventh Malaysia Plan: 373). Further, to make national

registration attractive the government made a provision under the Malaysia's Merchant Shipping Ordinance (1952) that a vessel must be 51% owned by Malaysian interests for it to be eligible to fly the national flag (Trace, Frielink and Hew, 2009: 22 - 23).

Table 5.1: World Top Maritime Fleet Ranking – 2011
(Ships owned by nationally-registered companies and by citizens)

	Number of Vessels			In thousand dwt			Total as a % of World Total
Country	National Flag	Foreign Flag	Total	National Flag	Foreign Flag	Total	
Greece	758	2,455	3,213	64,659,201	137,728,951	202,388,152	16.17
Japan	724	3,071	3,795	18,942,573	178,287,143	197,229,716	15.76
Germany	442	3,356	3,798	17,149,221	97,623,425	114,772,646	9.17
China	2,044	1,607	3,651	46,207,468	61,762,042	107,969,510	8.63
Rep of Korea	736	453	1,189	18,135,391	29,317,780	47,453,171	3.79
US	971	1,001	1,972	24,363,690	22,011,225	46,364,915	3.71
Norway	818	1,166	1,984	14,850,693	28,127,239	42,977,932	3.43
Hong Kong	399	313	712	24,102,438	13,080,401	37,182,839	2.97
Denmark	383	592	975	13,998,073	21,113,253	35,111,326	2.81
Taiwan	97	565	662	4,096,790	28,863,160	32,959,950	2.63
Singapore	659	363	1,021	18,693,547	12,939,490	31,633,037	2.53
Bermuda	17	268	285	2,297,441	28,252,207	30,549,648	2.44
Italy	616	220	836	16,556,782	6,774,107	23,330,889	1.86
UK	366	412	778	89,277,892	13,395,899	22,323,791	1.78
Turkey	551	648	1,199	7,869,898	11,914,688	19,784,586	1.58
Russia	1,406	485	1,891	5,548,938	13,952,473	19,501,411	1.56
Canada	201	226	436	2,474,401	16,654,836	19,129,237	1.53
India	460	74	534	14,679,913	3,445,887	18,125,800	1.45
Malaysia	**421**	**105**	**526**	**9,323,448**	**4,743,829**	**14,067,277**	**1.12**
Belgium	91	158	249	6,119,923	6,835,060	12,954,983	1.04
Iran	62	80	142	628,381	12,024,439	12,652,820	1.01
Saudi Arabia	70	105	175	1,745,029	10,675,882	12,420,911	0.99
Brazil	128	44	172	2,227,804	8,400,258	10,628,062	0.85
Indonesia	868	85	953	8,203,079	1,757,088	9,960,167	0.8
Cyprus	129	158	287	4,016,022	5,462,113	9,478,135	0.76
Netherlands	522	320	842	4,357,102	5,076,376	9,433,478	0.75
United Arab Emirates	69	354	423	655,296	8,705,135	9,360,431	0.75
France	177	274	451	3,179,832	5,888,255	9,068,087	0.72
Vietnam	476	86	562	4,723,669	2,249,774	6,973,443	0.56
Sweden	115	186	301	1,161,602	4,481,787	5,643,389	0.45
Kuwait	35	45	80	2,986,997	2,636,129	5,623,126	0.45
Isle of Man	–	33	33	–	5,456,847	5,456,847	0.44
Spain	163	226	389	1,508,173	3,482,572	4,990,745	0.4
Thailand	285	53	338	3,475,509	1,014,469	4,489,978	0.36
Qatar	46	32	78	878,634	3,315,599	4,194,233	0.34
Total of 35 countries	15,314	19,618	34,932	378,744,850	817,449,818	1,196,194,668	95.57
World Total			45,662			1,378,230,893	

Source: Malaysia Shipowners' Association, 2011: 8

Although the Malaysian companies and citizens own a reasonable number of nationally registered ships, looking at a complete scenario of the shipping policies, there appeared to be a weak element in the way they were managed and organised at the institutional level. This was primarily because the government delegated the management of shipping matters to various agencies as shown in Table 5.2. This type of administrative scenario has the potential to create difficulties for any single agency to formulate and implement a specific policy to shipping sector as each agency may tend to focus more on its core function, thus possibly produces conflicting directives if it does not understand fully issues concerning shipping matters. This has hampered the effort in formulating a comprehensive shipping policy. According to Khalid (2010: 2) the absence of a national merchant shipping policy hampers the long-term development and boosts the growth of the shipping sector in a structured, systematic and sustained manner. A comprehensive policy would provide a better platform in observing the international conventions, rules, regulations and best practices related to security matters in addition to the ISPS Code which is currently enforced for the ships engaged on international voyages.

Table 5.2: Institutional Framework in the Implementation of Malaysian Shipping Policy

No	Ministry,agency,unit	Roles and fucntions
1.	Implementation and Coordination Unit, Prime Minister's Department	Responsible for MISC, PNSL, ALAM and Petronas.
2.	Economic Planning Unit, Prime Minister's Department	Responsible for the allocation of funds to organizations in the industry and for making policy decisions for development and privatisations of ports
3.	Ministry of Transport	Provide secretariat for the National Shipping Council and is responsible for the National Maritime Council.
4.	Maritime Division	This division is responsible to plan, develop, and execute legislation, policies and programmes related to shipping and ports.
5.	Marine Department	All legislation, including the Merchant Shipping Ordinance. This includes all matters relating to safety. The Marine Department also has responsibility for ports and landing place.
6.	Ministry of Entrepreneur Development	Responsible for the development of national shipyards (MARA & MSE) and licensing of haulage and trucks.
7.	Ministry of Finance	Introduction of fiscal measures relating to the maritime industry and provision of ship financing established under bank industry, a fund for the acquisition of vessels.
8.	The Custom and Excise Department	Responsible for imports and export matters and involved in the implementation of EDI.
9.	Inland Revenue Department	Introduction and interpretation of tax legislation relating to the activities of ship-owners.

Source: Saharuddin, 2001: 432

However, this does not mean that the government totally neglected to establish a specific policy for the development and protection of domestic shipping. Efforts were made to introduce a Cabotage Policy (Coastal Shipping Policy) in 1980. To implement this effectively, the government established the DSLB under the aegis of the MOT to regulate and control the licensing of ships engaged on domestic shipping between ports in Malaysia (Farid, n.d 1). The MOT stated:

> Under this policy, the shipping of goods and carriage of passengers from any port or place in Malaysia to another port or place in Malaysia including the exclusive economic zone must be by Malaysian registered vessels holding valid Domestic Shipping Licenses. The Merchant Shipping Act (Amendment) 1998 has expanded the definition of 'domestic shipping' to include other service-oriented activities namely dredging, cable and pipe laying and hydrographic surveys. Ships employed in such activities are therefore subject to licensing (Ministry of Transport, Malaysia, 2011).

Although there is no specific policy apart from a policy for the domestic shipping, for the overall development of the shipping sector, the government has shown affirmative concern in terms of monetary assistance in the mid-term review of the Seventh Malaysia Plan where it stipulates that:

> The local shipping industry will be expected to consolidate and take more strategic measures such as leasing arrangements and global alliances with the aim to improve services, gain economies of scale, lower costs and share risks. Benefits will accrue in the areas of logistics management, leasing of containers, purchases of spare parts and training. The conversion of the existing RM 1.1 billion Shipping Fund into a revolving fund as a measure to expand shipping capacity will be studied. By the end of the Plan period, the number of ships registered in Malaysia is expected to increase to 3,500 ships with a total capacity of 7.5 million dwt (Mid-Term Review of the Seventh Malaysia Plan, 1999: 321).

5.5 **An overview of port sector**

Ports in Malaysia are administered either by the Federal Government or State Governments. There are altogether seven major Federal ports which come under the jurisdiction of the MOT, namely Port Klang, Penang Port, Bintulu Port, Johor (Pasir Gudang) Port, Port of Tanjung Pelepas (PTP), Kuantan Port and Kemama Port. Map 5.3 below illustrates the location of the main ports. These ports are regulated by the Port Authorities Act 1963. To manage these Federal ports, statutory bodies were established by the Federal government, included the Port Klang Auhtority, the Penang

Port Commission, the Johor Port Authority, the Kuantan Port Authority, the Kemaman Port Authority and the Bintulu Port Authority.

Map 5.3: Location of Major Ports in Malaysia

Source: The National Maritime Portal, 2009
Note: The Federal ports that come under the purview of MOT in the list of major ports shown in Map 5.3 are as follows: Port Klang, Penang Port, Johor Port, Port of Tanjung Pelepas, Kuantan Port, Kemaman Port and Bintulu Port.

Looking from a geographical point of view, two out of seven Federal ports in Malaysia – Port Klang and Penang Port are situated along the SOM. The Johor Port which is another Federal port located in the southern part of Peninsular Malaysia though not considered as the SOM port also serves the traffic generated by the states bordering the Straits (Naidu, 1997: 33). In principal such a position implies that some of the key Malaysian ports naturally demand a multi dimensional attention for effective function.

According to Ahmad (1997: 8), the SOM is viewed by the international maritime users as a key feature in the development of commerce and security in the East-West linkage as well as the artery for Malaysia's survival as an independent state. For economic powerhouses such as China, Japan and South Korea, the Straits essentially become a 'critical lifeline' channelling energy shipments to fuel their economies (Shahryari and Mohammad, 2011: 4-5). As a very busy international waterway, the SOM is a conduit for more than one third of world's trade and more than half of the

world's oil shipment annually. The Straits registered 71,300 and 74,000 vessel movements in 2009 and 2010 respectively (Hamidi, 2011) with additional traffic of 30,000 barter trade vessels and ferries plying between Peninsular Malaysia and Indonesian Sumatra Island annually. It is estimated that the total ship traffic will swell to 140,000 in another decade (Shahryari and Mohammad, 2011: 4).

In addition to the major ports, there are about 105 minor ports or landing jetties under the purview of the Marine Department (Rahman, Janib and Wei,1997: 15). Ports in East Malaysia (Sabah and Sarawak) come under the administration of the State Government. The ports in Sabah are regulated by the Sabah Ports Authority, a state statutory body established under the Sabah Port Authorities Enactment 1967. The Sabah state's Ministry of Communications and Works is responsible for the Sabah Port Authority. The state ports in Sarawak were established under the Sarawak Port Authorities Ordinance 1961 and are regulated by three state port authorities, namely the Miri Port Authority, the Kuching Port Authority and the Rajang Port Authority. Sarawak port authorities are under the purview of the state's Ministry of Infrastructure Development and Communications. There are a total of 49 ports in East Malaysia (Khalid, 2007: 3 and Jamaluddin, 2002: 143).

Ports in Malaysia can be categorised into two distinct groups: the publicly owned and the privately owned ports. The once public Federal ports which were placed under the respective port authorities have been privatised. Here the port authorities assume the regulatory function while the operation of the ports has been transferred to private companies through concession agreements (Interview, Code: 02).[22] The privatisation of ports, pioneered in the case of Port Klang, is considered in Chapter six.

[22] The date of privatisation of each Federal Ports is as follows:
(i) Kelang Container Terminal (taken over by Northport later) : 17 March 1986
(ii) Northport, Port Klang : 1 December 1992
(iii) Johor Port : 1 January 1993
(iv) Bintulu Port : 1 January 1993
(v) Penang Port : 1 January 1994
(vi) Westport, Port Klang : 25 July 1994
(vii) Port of Tanjung Pelepas : 24 March 1995
(viii) Kuantan Port : 1 January 1998
(ix) Kemaman Port : 1 October 2006 (Interview, Code: 02).

5.5.1 **Malaysian port policy**

Historically Malaysia had two main ports during the colonial era, Port Klang and the Penang Port. Port Klang, renamed from Port Swettenham, has been playing a fundamental role in trade facilitation over a century.[23] Considering its pivotal role for Malaysia's economic development, a detailed account of the Port Klang is elaborated in the next chapter.

Notably however, until the Seventh Malaysia Plan there was no overall specific policy for ports in Malaysia. Thereafter more attention was given to Port Klang. As Port Klang had been considered the premier port, specific policies were formulated to enhance its position as one of the leading container ports of the world. Nonetheless the development of other ports was never entirely overlooked. The main concentration was on the Federal ports instead of the minor ports. According to Naidu and Lee (1997: 28-39), the government stimulated the economic growth through the five-year plans since the 1960s by giving greater importance in infrastructure development with port as one of the sectors included in the list of development targets. As part of the strategy to sustain the economic growth and serve the needs of growing external trade as shown in Table 5.3, the physical capacity of port sector was increased with the construction of new ports and expanded existing facilities under the development programmes. In a broad overview, the data clearly illustrates that there was a remarkable growth in external trade in every ten years. For instance, the amount of total trade registered in the 1960 was RM5,078 million (USD1,368 million). It then grew to RM9,451 million (USD3,048 million), RM51,622 million (USD16,652 million), RM158,764 million (USD51,214 million) and RM1,168,622 million (USD376,975 million) in 1970, 1980, 1990, 2000 and 2010 respectively. On this aspect, (Rahman, Janib and Wei,1997: 17) claim that;

> As the country's trade increases, port facilities should also be further expanded to meet the increasing demand for better and more efficient services, otherwise Malaysian merchandise will continue to be exported through Singapore.

[23] Port Klang Authority celebrated its 110 years on 23 – 25 September 2011 under the theme "Celebrating Over 100 years of Port Klang" (Port Klang Authority, 2011).

Table 5.3: Malaysia's Principal Statistics of External Trade 1960-2011 in Million Ringgit Malaysia (RM)

Year	Export	Import	Total Trade	Trade Balance
1960	2,927.4	2,150.6	5,078.0	776.8
1961	2,626.1	2,230.5	4,856.6	395.6
1962	2,625.9	2,447.4	5,073.3	178.5
1963	2,704.6	2,516.9	5,221.5	187.7
1964	2,780.9	2,521.4	5,302.3	259.5
1965	3,782.6	3,356.2	7,138.8	426.4
1966	3,845.8	3,378.7	7,224.5	467.1
1967	3,722.8	3,319.0	7,041.8	403.8
1968	4,122.5	3,524.1	7,646.6	598.4
1969	5,051.6	3,581.9	8,633.5	1,469.7
1970	5,163.1	4,288.4	9,451.5	874.7
1971	5,016.8	4,416.2	9,433.0	600.6
1972	4,854.0	4,543.2	9,397.2	310.8
1973	7,372.1	5,933.9	13,306.0	1,438.2
1974	10,194.7	9,891.2	20,085.9	303.5
1975	9,230.9	8,530.4	17,761.0	700.5
1976	13,442.0	9,713.3	23,155.3	3,728.7
1977	14,959.2	11,164.7	26,123.9	3,794.5
1978	17,073.9	13,645.9	30,719.8	3,428.0
1979	24,222.0	17,161.1	41,383.1	7,060.9
1980	28,171.6	23,451.0	51,622.6	4,720.6
1981	27,109.4	26,603.8	53,713.2	505.6
1982	28,108.2	29,023.0	57,131.2	-914.8
1983	32,771.2	30,795.2	63,566.4	1,976.0
1984	38,646.9	32,925.9	71,527.8	5,721.0
1985	38,016.7	30,437.8	68,454.5	7,578.9
1986	35,720.9	27,921.4	63,642.3	7,799.5
1987	45,224.9	31,993.9	77,158.8	13,291.0
1988	55,260.0	43,293.4	98,553.4	11,966.7
1989	67,824.5	60,858.1	128,682.6	6,966.4
1990	79,646.4	79,118.6	158,764.9	527.8
1991	94,496.6	100,831.1	195,327.7	-6,334.4
1992	103,656.7	101,440.5	205,097.2	2,216.2
1993	121,237.5	117,404.7	238,642.2	3,832.8
1994	153,921.2	155,921.0	309,842.2	-1,999.8
1995	184,986.5	194,344.5	379,331.0	-9,358.0
1996	197,026.1	197,279.8	394,305.9	-253.7
1997	220,890.4	220,935.5	441,825.9	-45.0
1998	286,563.1	228,124.5	514,687.6	58,438.6
1999	321,559.5	248,476.8	570,036.4	73,082.7
2000	373,270.3	311,458.9	684,729.2	61,811.4

2001	334,283.8	280,229.1	614,512.9	54,054.7
2002	357,430.0	303,090.5	660,520.5	54,339.6
2003	397,884.4	316,537.9	714,422.2	81,346.5
2004	481,253.0	399,632.2	880,885.2	81,620.8
2005	536,233.7	432,870.8	969,104.5	103,362.9
2006	589,240.3	478,147.9	1,067,388.3	111,092.4
2007	604,299.6	502,044.6	1,106,344.3	102,255.0
2008	663,013.5	519,804.3	1,182,817.8	143,209.2
2009	552,518.1	434,669.8	987,187.9	117,848.3
2010	639,428.1	529,194.6	1,168,622.7	110,233.6
2011	694,500.0	574,200.0	1,268,700.0	120,300.0

Source: Compiled from Department of Statistics Malaysia, 2011

Under the blueprint for port development in the five-year plans, each port was developed according to trade need. As noted above, Malaysia had only Port Klang and the Penang Port to facilitate international trade during the British rule. These two ports served the national need until 1970. During this period, the Penang Port largely served the external trade requirements of north western Peninsular Malaysia comprising states from Perlis, Kedah, Penang and Perak. On the other hand, Port Klang handled most of the throughput of west-central Peninsular Malaysia; its hinterland included Selangor and extended northwards to Perak, eastward to Pahang, Terengganu and Kelantan and in a southerly direction to Negeri Sembilan and Malacca (Naidu, 1990: 149-150).

As a consequence of the inability of these two ports to fulfil the capacity requirement for growing trade and the country's needs, under the Second Malaysia Plan two more ports were constructed, the Johor Port and Kuantan Port in 1977 and 1984 respectively. Following this development, two other ports were subsequently built, the Bintulu Port in 1982 and the Kemaman Port, known as Kemaman Supply Base, in 1983. The PTP, a greenfield port was the latest Federal port constructed in the southwestern tip of Peninsular Malaysia and completed in 2000. This port was made as a transhipment hub for the containers to compete equally with the arch rival Port of Singapore (Ministry of Transport, 2011). Interestingly though, all these Federal ports are located in the Peninsular Malaysia (West Malaysia) except Bintulu Port on the northern coast of Sarawak on Borneo (East Malaysia). The main reason for this imbalance is simply that the main international trade for the country takes place along the coastline where the Federal ports in Peninsular Malaysia are located. Cargo for

West Malaysia is handled through feeder services from Peninsular. The Bintulu Port in East Malaysia specialises in handling LNG and LPG cargoes (Jamaluddin, 2002: 140-141).

In an effort to make port development more successful, all these Federal ports were designed and encouraged to specialise in handling certain types of cargo so as not to affect the business of other ports. Even though these ports were generally assigned to handle merchandise goods in their respective industrial zone and closest hinterlands, yet they assume certain specialisation according to their need. For example, the Kuantan Port was initially established with the intention of handling timber products in the eastern region, whereas the Kemaman Port, which is located about 50 kilometers north of the Kuantan Port in the same region was made to specialise in serving steel manufacturing plant and as a supply base for the oilrigs off Kemaman coast. The Bintulu Port is highly specialised in serving liquefied natural gas and other petroleum products (Jamaluddin, 2002: 140-141). Though specialised, these ports also handle containers and other types of cargo.

Developments in Malaysia's ports since the 1980s can be associated with the recommendations of a 1988 National Port Plan (NPP) study. Since this Plan particularly affected Port Klang, the background and recommendations of this study are considered in the following chapter. As well as encouraging each port to specialise in their respective locality or Malaysian region, the government aimed to promote port development through privatisation, financial support for capacity expansion and load centring as well as supply driven policies specific to Port Klang.[24]

As such, in spite of specialisation, the port sector which had a similar kind of scenario as in the case of shipping with a lack of a single policy (except domestic shipping)

[24] Load centre theoretically refers to container traffic concentration in a few, large ports. Generally, it involves "the requirement for port and terminal operators, aiming to achieve or maintain "main port" status, to provide overextended facilities and take the risk of exacerbating excessive competition are two issues which take central place in the debate around load-centring and the choice between the 'direct call versus transhipment and feedering port" options" (Monie, 1996: 273). In Malaysia's case, as stipulated in the Privatisation Feasibility Report of June 1988 'load centre' termed as "in keeping with the primary policy objectives of promoting direct shipping service to Malaysian ports and increasing port productivity" (Klang Port Authority, 1988: 428). Port Klang is to become the principal container port and Malaysian load centre for most trade routes. As such, Port Klang is expected to handle most of the international container traffic from the northern and central parts of Peninsular Malaysia, as well as from Sabah and Sarawak (Klang Port Authority, 1988: 428).

that decides the future direction of the port industry as a whole, received a directive in the Seventh Malaysia Plan (1996-2000) as a result of the NPP study. In the Seventh Malaysian, a distinct directive was issued for making the Port Klang a load centre and a transhipment as well as regional hub port (Seventh Malaysia Plan, 1996: 372).

Apart from this, the government also intended to create a National Port Authority in the same Plan period in which the Plan states:

> To inject greater focus in port development policy and strategy, as well as enhance professionalism in the maritime sector, a National Port Authority, with the requisite expertise, will be established to replace these numerous regulatory authorities. With the strengthened single regulatory authority to monitor developments in the maritime sector, the efficiency and quality of port-related services are expected to improve in line with predetermined performance standards (Seventh Malaysia Plan, 1996: 373).

This new organisation, also termed the Malaysian Port Commission (MPC) was not only expected to act as a regulatory authority but also to coordinate port policy at the national level. The Commission was expected to work as a single umbrella body by merging all the existing Federal port authorities with the objective of planning for national port development and prioritising development projects, rather than for each port acting individually. However the proposed MPC created apprehension among the terminal operators that it would have a "total say" over the running of Malaysian ports (Lloyd's List, 28 May 2001). Hence, the proposed MPC was not materialised. Although the MPC would have no direct impact on port security, such an organisation would provide a better ground for smooth coordination and standardised practice to enhance the port competitiveness across the Federal ports.

In this regard, Clark, Dollar and Micco (2004) contend in their analysis that one way of increasing the port efficiency that goes along with port competitiveness is through having competitive transport charges. Since 1965 the Malaysian government has maintained the lowest port tariffs in this region from a commercial point of view in order to strengthen port competitiveness. Although operators have voiced their concern about increasing operational costs, the government is mindful of the risk of liberalizing the tariff regime for the interest of balancing commercial imperatives and enhancing trade. However to be fair to both the operators and users, the MOT undertook measures to review the overall tariff structure (Khalid, 2008). According to

a senior official of the MOT, the review had yet to be finalised (Interview data, Code:02).

Considering the process of port development continues, the Malaysian government under the Tenth Malaysia Plan (2011-2015), announced the formation of a national port policy to outline the objectives, strategic directions and further development of the port sector (Tenth Malaysia Plan, 2010: 111). In the same Plan period, the government intends to establish a National Port Council to coordinate the management of ports nationwide (Baird Maritime, 2010).

5.6 **Conclusion**

This chapter essentially highlights the maritime richness that had contributed significantly to nurturing the national economy since Malaysia's independence and the Malaysian government's effort to make the country one of the leading maritime nations in the region. This has to be seen in the overall historical context in which the country was heavily exposed to maritime trading activities and colonial influences by several parties. Along with contributions of many different sub-sectors within the maritime sector for the development of national economy, both the port and shipping sectors however considered equally important as they are playing a fundamental role in facilitating trade as more than 90% of Malaysia's international trade, the lifeblood of its economy is being carried through the oceans via its international ports. Considering their importance, the government formulated separate policies for shipping and ports. Under different Five Year Plans the government undertook various port expansions especially targeting the Federal ports in meeting the growing merchandise trade. From these development plans, specific policies were formulated for Port Klang to further strengthen the port. Hence, the following chapter gives a broad account of the physical as well as administrative development of the Port Klang as it is the key port for this research. Importantly, the chapter will also elaborate early port security issues, so providing a platform for further discussion of various aspects of port security in subsequent chapters.

CHAPTER SIX

PORT KLANG DEVELOPMENT: ADMINISTRATION, GOVERNANCE AND EARLY SECURITY ISSUES

6.1 Introduction

This chapter explains the general development of Port Klang. It starts with a brief history of the port, then examines the changes that have taken place in Port Klang's administration and governance and also identifies the port security issues before the 9/11 incident. It is essential at this stage to provide a brief historical account to form a solid basis for understanding how Port Klang, being the national premier port, evolved over time. Apart from the physical development, the port underwent several changes in administrative matters where two main measures in 1963 and 1986 in particular, contributed to the improvement of port performance. These measures also had early consequences for port security. To have a holistic picture of the Port Klang and its current security measures, it is necessary to comprehend its security setting before 9/11. This chapter therefore provides a basis to explicate other security measures and policy concerns which are dealt with in subsequent chapters.

6.2 A brief early history of Port Klang

The preceding chapter has explained that the strategic position of Malaya made it a viable place for international trading and therefore attracted the interest of a number of colonial powers which subsequently fought among themselves to establish their hegemony. However at the time of British rule beginning in the 18th century, ports in Malaya entered into a different dimension. Britain was no longer interested in treating Malacca as a main trading centre when they found out that its harbour was not suitable for big ships. Therefore Port Swettenham, (to be re-named Port Klang in 1972) was founded in 1901. The idea of constructing Port Swettenham had been mooted as far back as 1885 for replacing the existing up-river Port of Klang when the idea of constructing a railway from Kuala Lumpur to the coastal area was put forward by the colonial administration.[25] During the construction of the twenty-two miles of

[25] Historically, for many years before 1885, Port of Klang which was located 12 miles up the winding and muddy Klang River had been the primary source for providing port services between the Straits Settlement and Selangor. However this port had only three poorly constructed wooden jetties and only able to handle ships less than 13 feet (Jamaluddin, 1963: 1).

railway line (Klang Port Authority, 1988: 30) they realized the necessity of providing port facilities at the railway terminus at the newly identified location called Kuala Klang. The new coastal area was found to have a good harbor with deep anchorage, and very suitable for wharves.

The construction of the port with initial three wharves was completed in 1901 and the port facilities were handed over to the Ways and Work Department of the Malayan Railways Administration which was placed under the Federated Malaya States (FMS) at that time to operate and administer the port. The Marine Department was responsible for navigational aids, safety to shipping and other maritime matters.

Following the completion of this new facility, the Port of Klang (the old port at Klang river) was officially closed on 15 September 1901. As a result of this development, all traffic was re-routed to this new port in Kuala Klang, described at its opening as "the most commodious and best equipped port in the Peninsula" (Klang Port Authority, 1988: 53). It was named as Port Swettenham, after Sir Frank Athelstanes Swettenham, the Resident General of FMS who was in 1897 promoted to Governor of the Straits Settlements and High Commissioner for the Malay States (Jamaluddin, 1963: 1-5).

6.3 **Port development**

The evolution of Port Klang should be viewed in broad perspective. This is not a port founded as a modern 'green field' port as in the case of the other main Malaysian ports, Kuantan Port and PTP. The above historical description is the testimony to the British influence and their legacy in forming a strategically well connected and well equipped port that could facilitate economic development. Though initially the port was developed for the colonial interest nevertheless the seed sown in the beginning paved the way for subsequent modernization of the port. The continuous progress made at various stages led to what is Port Klang today, which bustles with all the excitement and dynamism of a major port.

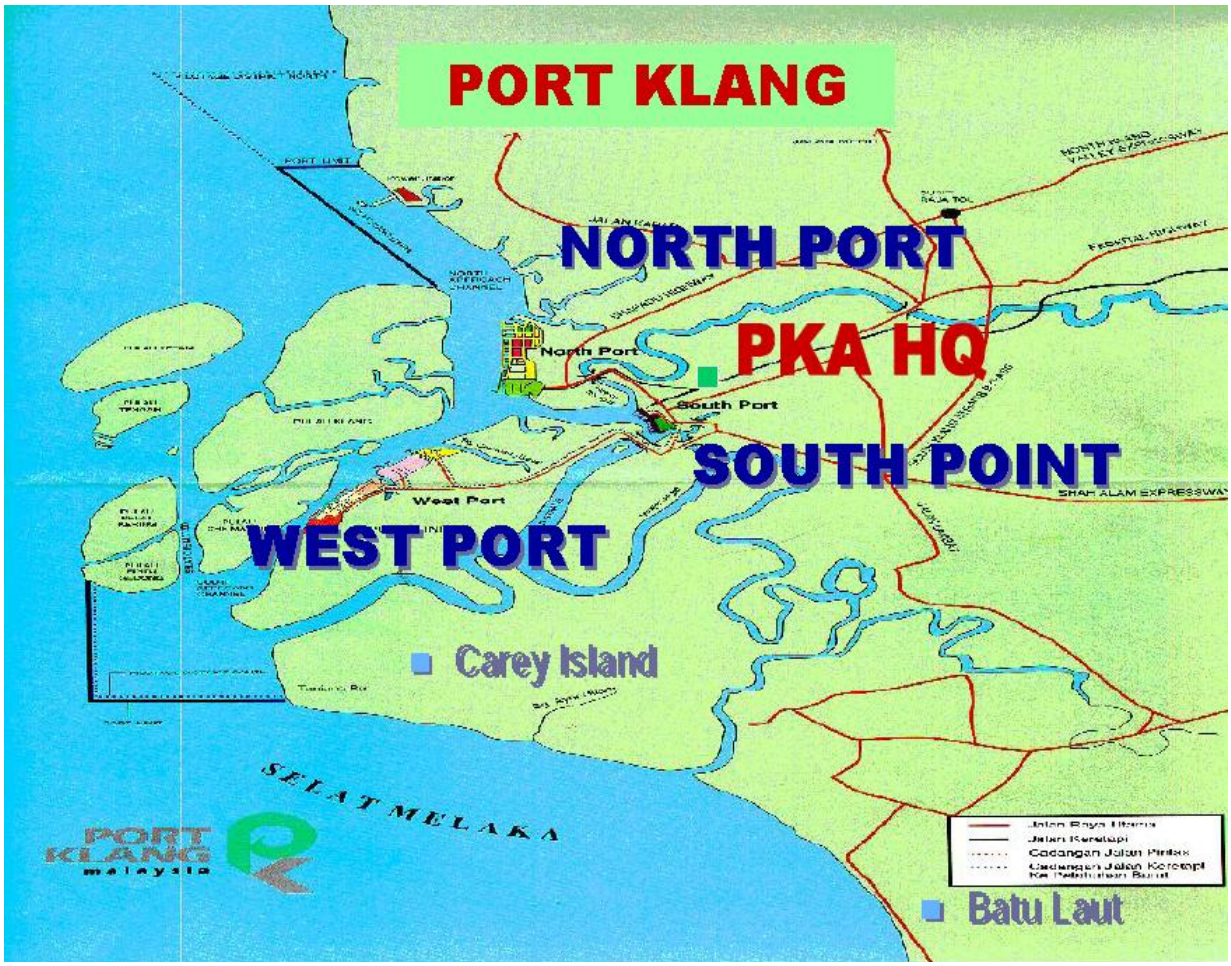
It is not the intention of this section to provide a comprehensive account of the development of Port Klang which began humbly with a couple of jetties in the early 1890's at Kuala Klang. Overtime the port undertook various physical development projects described below. But the key issue here is that during this process, two land mark measures were brought forward to further strengthen the port which is pertinent

to the issue of port security. These are the Port Authority Act of 1963 separating the port from railway administration, and port privatisation in 1986.

6.3.1 **Port facilities**

To begin with, it is best to describe the current port facilities of Port Klang where it serves as a gateway for the national economy. Map 6.1 below illustrates the location of modern Port Klang and the current position of two main terminals North Port (South point is part of North Port facility) and West Port.

Map 6.1: Location of Two Main Terminals of Port Klang – North Port (Including South Point) and West Port



Source: Subramaniam, 2006
Note: Scale : 1cm : 4 km

These are privately owned and managed since the port privatisation started in 1986. The port now, in 2011, has excellent facilities as a reflection of the port's status as a

main gateway, there is no doubt that the Port Klang increasingly figures as an important port in the development of trade in the SEA region as well as at international level (see Table 3.1), spurred by the opportunities arising from changing times and the support from the government (Gateway, 2009: 5). Table 6.1 elucidates the current facilities that have been developed in the port during the process of its evolution until 2010.

Table 6.1: Port Klang Facilities - 2011

CONTAINER	Northport	Westport	Total
BERTHS			
No of berths	12	11	23
Length (metres)	2,679	3,200	5,879
Draft (metres)	11.0 – 15.0	16	11 – 16
STORAGE			
Annual capacity	5 million TEU	6 million TEU	11 million TEU
Reefer points	751	1,236	1,987
EQUIPENMENT			
Quay cranes	26	34	60
Rubber tyred gantry cranes	57	92	149
Straddle carriers	67	-	67
High stackers	8	25	33
LIQUID BULK			
No of berths	4	5	9
Length (metres)	779	1,305	2,084
Draft (metres)	10.5 – 11.5	10 – 16.5	10 – 16.5
DRY BULK			
No of berths	2	4	6
Length (metres)	426	850	1,276
Draft (metres)	12	14 – 15	12 – 15
STORAGE			
Open storage (Sq m)	17,520	-	17,520
BREAK BULK			
No of berths	9	5	14
Length (metres)	1,286	1,000	2,286
Draft (metres)	6.0 – 12.5	15	6.0 – 15
STORAGE			
Warehouse (Sq m)	47,169	33,740	80,909
Open storage (Sq m)	57,805	80,357	138,162

Source: Gateway, July 2011: 23

Through various modernization processes by providing better facilities, Port Klang was able to register a remarkable cargo throughput for the past one decade. Table 6.2 demonstrates this.

Table 6.2: Total Cargo, Container and Ship Calls at Major Malaysian Federal Ports (2008-2011)

PORTS	KLANG	TG. PELEPAS	PULAU PINANG	JOHOR	KUANTAN	BINTULU	KEMAMAN
CARGO ('000 TON)							
2000	65,277	8,528	20,473	23,548	6,027	24,897	2,155
2001	70,149	36,891	20,473	27,307	7,532	25,210	2,054
2002	82,271	38,896	21,800	25,102	8,999	25,592	1,479
2003	88,888	50,224	22,390	27,798	9,804	28,977	2,987
2004	99,911	57,078	23,415	31,204	9,699	33,623	3,358
2005	109,659	59,552	22,563	28,568	9,411	36,405	3,019
2006	122,004	68,776	22,862	27,467	10,673	36,558	3,000
2007	135,514	84,150	27,222	28,841	10,065	38,484	3,778
2008	152,425	88,090	25,999	29,771	9,405	58,401	3,666
2009	137,694	95,155	24,259	25,234	10,273	34,642	2,880
2010	170,364	99,965	28,846	26,218	12,079	40,557	2,447
2011	151,969	95,457	24,000	21,921	12,772	33,496	2,129
CONTAINER (TEUs)							
2000	3,206,753	418,218	635,780	659,181	60,376	47,609	-
2001	3,759,512	2,049,487	604,294	638,718	76,339	66,139	-
2002	4,533,212	2,668,512	634,042	683,816	91,524	104,081	-
2003	4,841,235	3,486,785	688,171	750,466	108,108	145,661	-
2004	5,243,593	4,020,419	772,024	805,689	122,745	143,783	-
2005	5,543,527	4,177,121	795,289	836,744	119,075	147,800	-
2006	6,326,295	4,772,986	849,730	880,611	124,834	199,594	-
2007	7,118,714	5,465,065	925,991	927,285	127,600	251,800	-
2008	7,973,579	5,618,183	929,639	934,767	127,061	286,013	-
2009	7,309,779	6,016,451	958,476	844,856	132,252	248,452	-
2010	8,871,745	6,535,838	1,108,428	876,268	142,080	251,284	-
2011	9,603,856	7,499,298	1,199,219	831,609	132,262	211,362	-
SHIP CALLS							
2000	12,416	692	7,263	6,485	1,677	4,047	280
2001	14,207	2,283	7,460	6,242	1,855	4,375	266
2002	15,313	2,483	7,328	6,603	2,067	5,019	317
2003	16,251	3,150	6,428	6,879	2,280	4,825	363
2004	15,150	3,193	6,993	6,526	2,382	5,617	337
2005	15,044	3,128	6,220	6,438	2,195	5,775	319
2006	16,404	3,261	6,177	6,337	2,324	6,024	249
2007	17,104	3,747	6,036	6,004	2,143	6,007	372
2008	16,864	3,764	5,736	5,823	2,315	7,015	301
2009	15,355	3,776	5,559	5,121	2,447	7,514	224
2010	17,910	4,162	6,134	4,880	2,405	7,578	208
2011	17,725	5,125	6,347	4,880	2,459	7,689	261

Source: Statistics, Ministry of Transport Malaysia, 2011

The port owns such modern facilities with a capacity of handling 11 million containers alone and capable of handling other types of cargo with different capacities, because from just wooden jetties in the beginning as the demand increased,

the administration identified surrounding areas for further expansion. As a result, the former Port Swettenham opened up the North Klang Straits, named as North Port in 1967 as shown in Map 6.1. For over six decades before this, the colonial administration undertook several development projects. This was a response to higher demand which meant that the port encountered some deficiencies and congestion caused by surging cargo volumes and passenger traffic, as well as the need to cater for both local shipping and increasing calls by ocean-going steamers (Klang Port Authority, 1988: 81).

The expansion of port facilities at the North Klang Straits was already been considered in 1931 when the Imperial Shipping Committee, a high powered group of shipping and transport experts forwarded a proposal for port expansion to serve the increasing traffic and to allow for further port development (Klang Port Authority, 1988: 161-162). The proposal was accepted by the Federal Ports Committee on the basis "the operation of a new wharf is a practical and economic proposition and almost indefinite expansion is possible" (Klang Port Authority, 1988: 235). The proposed extension was finally completed at the end of 1963. The project was designed to overcome the port congestion in which the port registered a spectacular volume of cargo growth particularly in 1962 (Klang Port Authority, 1988: 315-316).

For example Table 6.3 shows a steady growth of cargo and ship traffic for the period from 1906 to 1962. The figure is highlighted in an average of five years beginning 1906. Generally, such a progressive growth over time had reduced the efficiency of the port. With the limited capacity during this time, Port Klang was unable to handle such a growth which eventually produced congestion. As we can see from the table, while merely handling 254,000 tonnes of cargo in 1906, the cargo throughput increased approximately three times in the 1940s and in 1955 onwards it went beyond one million tonnes. In 1962 the amount was close to two million tonnes. This corresponded well with the number of ship calls at Port Klang during the same time period. Although data is not available for the ship traffic before the 1960s, since the 1960s however, there was a noticeable surge in the number of ship calls. The big surge in cargo throughput and ship traffic in Port Klang during the 1960s can partly be attributed to the growing nature of the Malaysia's economy as a whole. In this context, Cho (1990: 32) points out:

> The performance of the Malaysian economy during the 1960s and 1970s, while unspectacular, was nevertheless sufficient to maintain growth and other demands. In the first half of the 1960s, for instance, exports grew extremely slowly while the value of imports grew at a rate of 3.5 percent per year. Such a pattern may be explained partly by the rapidly growing population but more accurately by the substantial increase in inflows of private long-term capital for investments in agriculture and industrial ventures…During the latter half of the 1960s, however, domestic demand grew only slightly and exports performed better than expected.

Hence the expansion of Port Klang capacity became paramount in the 1962 onwards to cater for the growth of both domestic and international trade.

Table 6.3: Cargo Growth and Ship Traffic (1906-1962)

Year	No of ships (ocean steamers)	Total Tonnes Handled
1906	14	176,326
1911	n.a	245,000
1915	214	224,887
1920	299	252,528
1925	n.a	360,000
1930	n.a	511,000
1935	n.a	397,000
1940	n.a	612,000
1945	n.a	613,000
1950	n.a	762,000
1955	n.a	1,201,669
1960	1,746	1,615,091
1961	1,539	1,689,696
1962	1,740	1,908,679

Source: Compiled from Jamaluddin, 1963, Port Sweettenham Feasibility Study, 1968 and Klang Port Authority, 1988
Note: n.a - denotes the missing data

In this sense, North Port facilities did not, however, prove sufficient to meet demand which continued to increase. As a result, the establishment of West Port in Pulau Lumut (Lumut Island) adjacent to North Port was mooted in 1981. Since previous development at Port Klang had taken place on mainland territory, this time a substantial port infrastructure had to be brought into existence on an island which was formerly a fishing village (Gateway, 2009: 12). One of the reasons for the choice of Pulau Lumut was that it was:

> an island about 15 kilometres long in the Klang River delta, bounded on the west side by the relatively deep, straight South Kelang Straits and on the north side by the Anchorage Reach where the water depth is of the order of 8 metres (Klang Port Authority, 1988: 394).

Pulau Lumut was earmarked as the ideal site of what was intended to become an ultra-modern port. The sea off Pulau Lumut has a depth of 14 metres and it could be deepened by another 3 metres to allow 80 thousand deadweight ton vessels to berth at any time without tide restrictions (Klang Port Authority, 1988: 441).

A *Business Times* editorial of 24 June 1989 highlighted the rationale for proceeding: "the Pulau Lumut project is being activated because capacity at Port Klang is not adequate to meet the soaring demand. Also, further expansion on the mainland is not possible" (Klang Port Authority, 1988: 424). After two feasibility studies in 1982 and in 1985 the project for constructing port facilities and industrial spaces on the forty-nine square kilometres of land was accepted. The government endorsed it explicitly and officially launched it on 8 August 1992. Furthermore, the project was identified as one of the principal infrastructure elements under the Fifth Malaysia Plan and was completed in several phases. The West Port commenced operation on November 1994 (Klang Port Authority, 1988: 392- 453).

With its up-to-date facilities especially the container terminals, Westport positioned itself ideally to become the preferred megahub for both local and transhipment containers (Gateway, 2009: 12).

6.3.2 **Port policy development**

It is clear from the above account that the development of Port Klang over the 20th century was a long process. Notwithstanding its geographically strategic location, natural resources and hence potential for maritime development, one obvious drawback however was that the ambition to realise that potential was not clearly spelt out in any of the government policies after gaining independence in 1957. With the formation of Malaysia in 1963, the government was more interested in nation building and national integration. Despite the fact that the maritime sector contributes to the development of marine-related industries as mentioned in the preceding chapter, in which subsequently encouraged the establishment a few other Federal ports apart from the Port Klang, in terms of government policy however, there was no significant

measure to stop the Malaysian cargo leakages to Singapore port. This was primarily because the local traders had accepted Singapore port as the main transport centre and the best alternative to transport the Malaysian goods because of its immediate and efficient services. For example, it was estimated that in the 1980's about 3.5 million TEUs of the 14.5 million TEUs handled by Singapore port was 'Malaysian cargo' (Llyod's List, 1998: July 31). Hence this reflected some weaknesses in the then existing government measures to further promote the local ports (Mak and Tai, 2001: 1).

Although, the government in order to fulfil its socio-economic obligation and to meet the growing demands of the economy, paid greater attention and spent more money on road and rail networking system as well as port expansion during the development period in the 1980's as illustrated in Table 6.4, the improved land transportation however indirectly encouraged more reliance on Singapore port as it was capable of providing good services with lower transaction cost and thus established itself as a regional port and main transport centre.

Table: 6.4: Infrastructure Growth by Sector (1965 – 1995)

Sector	**1965**	**1970**	**1975**	**1980**	**1985**	**1990**	**1995**
Roads							
Length of roads (kilometers)	15,356.0	21,995.0	24,037.0	26,219.0	38,973.0	50,836.0	64,328.0
Railways							
Length of roads (kilometers)	2,115.0	–	–	2,118.0	2,222.0	2,222.0	2,222.0
Ports							
Number of ports	2.0	2.0	2.0	6.0	9.0	9.0	9.0
Total capacity (millions in tons)	0.0	–	–	25.5	56.6	120.5	174.1
Number of containers	–	–	–	4.0	6.0	10.0	15.0

Source: Naidu and Lee, 1997: 33
Note: Total number of ports in the 1990's represents six Federal ports and three state ports

This situation also reflected Singapore's long-standing position since 1891 because of its location and colonial interest as a centre for entrepot trade. From the late 1960s Singapore had begun to focus on strengthening itself as a transhipment hub for international cargo, which also included local cargo from Malaysia and Indonesia

(Cullinane, Yap and Lam, 2007: 288-289). The quality and range of services available at Singapore port provided a better option for the Malaysian shippers to ship most of their goods via Singapore rather than using local ports (Naidu,1990:166). After all, the furthest land journey from Northern Peninsular (Penang) to Singapore takes about 14 hours (Mak and Tai, 2001: 201). Another added reason for relying on Singapore port was:

> …that the excessive number of ports has spread cargo too thinly among them [Malaysian ports]. As a result, many shipping lines avoid making direct calls at Malaysian ports and prefer to feed Malaysian cargo through the terminals of Singapore Port. An estimated 40 percent of Malaysia's external trade is shipped through Singapore, and a much larger portion of Malaysia's container traffic is transhipped through Singapore Port (Naidu and Lee, 1997: 40).

As the dependence on Singapore became more prominent in the 1980's, the government decided to have its own efficient international port by increasing its productivity and reduce the under-utilisation of port capacity (Naidu and Lee, 1997: 39-40). Thus the Malaysian government undertook several initiatives to stop cargo leakages through Singapore port where it was considered a strong rival as compared to other neighbouring ports. Subsequently various plans were introduced to enhance local port competitiveness and increase efficiency. Since Port Klang had all the required infrastructural support, the government chose to strengthen the port's commercial viability and provide a better service to the local users.

To formulate a long term plan for the future development and management of Malaysian ports, the government authorised the National Ports Plan (NPP) study with the support of World Bank in August 1986. This was completed in March 1988. The study was intended to prepare a master plan for a systematic and coordinated development of the ports in the country to avoid redundancy and under-utilization of existing port facilities as well as to establish coordinated port expansion strategies (Naidu, 1990, Abdullah, 1992: 361, Rahman, Ianib and Wei, 1997: 19-20). However according to Naidu (1990) the main essence of this plan was to redirect the shipment of Malaysian goods to Malaysian ports instead of Singapore port. Writing in 1990, he argues that this has been clearly stated in the Terms of Reference of this study that "as far as ports are concerned, the policy is to channel as far as economically justified all Malaysian cargo through Malaysian ports" (Naidu, 1990: 153).

In respect of protecting the national cargo, the NPP recommended that load centring policy would be the viable option. Under this strategy a sufficiently large amount of a particular cargo would be concentrated in a certain port and this critical mass provides a good opportunity for shipowners to initiate direct shipping services between the load centre port and foreign ports. Port Klang was recommended as the principal concentration port in Malaysia (Naidu, 1990: 160). The rational for this policy as envisaged by the MOT by stating that:

> As the premier port, Port Klang is designated as load centre for both Malaysian and South East Asian containers. The government has simplified documentation requirement, build sufficient infrastructure and ensured internationally accepted equipment ratio in Port Klang and implement Electronic Data Interchange (EDI) to ensure efficiency of Port Klang is the best in the region. It is also the government's policy to divert Malaysia's containers being feedered to Singapore port to Port Klang to achieve the critical mass needed to make it attractive for Main Line Operators to call to Port Klang. This will develop Port Klang as a transhipment hub and distribution hub (Jamaluddin, 2002: 34).

Following this recommendation, the government issued a directive in 1993 to develop Port Klang as a load centre as well as a transhipment hub in this region (Sgouridis, 2003: 8).[26]

It should be stressed here that up to the present (2011) there is no official Malaysian policy with regard to ports contained in any single document. Most of it appeared in various parts of the five-year plans, mid-term reviews, annual economic reports and statements issued by the government through the public media (Mak and Tai, 2001: 200). Consistent with this approach, a policy on ports was spelt out in the Seventh Malaysia Plan (1996-2000) which among other things outlined distinct strategies, including (i) consolidation of cargo at Port Klang, (ii) establishing close link with regional ports as well as other ports in Sabah and Sarawak through the provision of feeder services at competitive rates, (iii) supply of efficient facilities and the gazetting of a free commercial zone, (iv) restructuring of rebates and tariff; (v) maximum back-up facilities, (vi) volume discount and (vii) foreign equity participation in the

[26] The term 'hub' usually refers to describe the centre of a hub-and-spoke structure. A hub port is referred as an area serving such functions as transshipment centre and a gateway for the larger hinterlands by connecting mainline services with various feeder networks (Song and Lee, 2005: 145).

Terminal Dedicated Berth Scheme (Mak and Tai, 2001: 201). Additionally, the Plan stated that:

> More concerted efforts will be undertaken to promote Port Klang as a hub port. Cargo from all other Malaysian ports which act as feeder ports will be consolidated, where possible through Port Klang where shipping services are more frequent and expedient. In this regard, close linkages with regional ports, as well as those ports in Sabah and Sarawak, will be established through the provision of feeder services as competitive rates (Seventh Malaysia Plan, 1996: 372).

In the mid-term review of the Seventh Malaysia plan (1999), the government further emphasised the importance of sea borne trade and making Port Klang a primary national gateway.

> During the remaining Plan period, ports, shipping and maritime-related services will play an increasingly important role in improving foreign exchange earnings, given that over 90 per cent of the nation's international trade is seaborne. The main strategy will, therefore, be to intensify the promotion of Port Klang as a hub and load centre for the region. In addition, continuous efforts will be undertaken to ensure the integrated development of all service providers in the transportation chain in order to enhance utilization of local ports (Mid-term Review of the Seventh Malaysia Plan, 1999: 319).

The current, now well-established role, of Port Klang is reflected in this statement:

> Port Klang, the premier port, is designated as the national load centre for both local and regional containers. This is to ensure sufficient critical mass at one port and subsequently make it an attractive destination for Main Line Operators (MLOs), thereby developing the port as a transhipment and distribution hub of the region (Ministry of Transport, 2011).

In further expanding and strengthening the port sector, the government adopted another implicit policy called the *Supply-Driven* policy. The policy adopting the objectives of (i) developing and expanding port facilities, (ii) enhancing the utilization of existing port facilities, (iii) improving efficiency and productivity of port operations, (iv) enhancing port capacity, (v) promoting multi-modalism, (vi) pushing ahead with port privatisation, (vii) developing and improving ancillary services; (viii) developing and improving land side transportation and (ix) enhancing and promoting automation and use of computers in port operations (Mak and Tai, 2001: 201). The *Supply Driven* policy aimed to provide high quality port services without congestion

and low waiting times which in turn requires adequate port capacity and high utilization of port facilities (Sgouridis, 2003: 25).

Evidentially such measures have produced a remarkable cargo growth in Port Klang as shown in Table 6.2 above as well as placing it in top twenty world container ports shown in Table 3.1.

6.4 **Port Klang administration, governance, and ownership**

Following the development of North Klang Straits, the Port Authorities Act 29 May 1963 allowed the Port Swettenham to be administered by a Port Authority and so completely divorced from the Railway Administration. The Railway Administration became a 'corporation aggregate'. The expectation was to allow both authorities to operate on a purely commercial basis (Klang Port Authority,1988: 315). This 1963 Act is considered the first hallmark in shaping the port towards a competitive position. The same Act allowed for the establishment of port security force. The new authority was subsequently called the Port Swettenham Authority.

With this separation, Port Swettenham was brought one step higher for its significant contribution to the State of Selangor. Thus, His Royal Highness the Sultan of Selangor, announced a change of name for the port. The Port Swettenham was re-named *Port Kelang.* It was mentioned that;

> Since the announcement was made on the auspicious day it is anticipated that the change will augur well for the future of the port. The contributing factor that may have influenced His Royal Highness to this proposal was the rapid development of the Royal Town of Kelang as well as the port. It is His Royal Highness' considered opinion that the time has come for the port to revert to its original name i.e. Port Kelang, which was the name of the port of Selangor, and all early references referred to the port as Port of Kelang (Klang Port Authority, 1988: 356).

If we look at the social perspective, the decision of Sultan to change the name of port according to local context signifies that there is a need to impart national pride and create an identity for the country. It was apparent that since the country had been freed from the British rule in 1957, perhaps there was realisation that it was not appropriate to retain the Resident's name to reflect the distinctiveness of a port that serves significantly for national economic development. In other words, by removing

certain traces of colonialism especially in socio-economic sector would promote and instil national pride among the locals.

Corresponding to this decision, on 12 January 1972 Port Swettenham was officially renamed Port Klang or Port Kelang. In Malay language it began to be called Pelabuhan Kelang. The Port Swettenham Authority was renamed *Kelang Port Authority* in July 1972 after the legal formalities had been complied with (Klang Port Authority, 1988: 357).[27] Under this new arrangement, the Port Authority acted as a statutory body answerable directly to the MOT.

Privatisation was a second hallmark tested in Port Klang in response to the changing times and strengthening port services and competitiveness. According to the Economic Planning Unit (EPU) the fundamental aspect of overall privatisation strategy was to "facilitate the country's economic growth, reduce the financial and administration burden of the Government, reduce the Government's presence in the economy, lower the level and scope of public spending and allow market forces to govern economic activities and improve efficiency and productivity in line with the National Development Policy" (Economic Planning Unit).

Malaysia began privatising some of the public utilities in 1983. This policy was aimed at attracting private sector involvement in a partnership basis between the public and private sector in an effort to share the management, operation and investment requirements of a public owned enterprise (Phang, n.d: 1).

Accordingly, the Government's intention of privatising Port Klang was in the Fifth Malaysian Plan 1986-1990. The Plan briefly states:

> With regard to private sector participation in the operation and management of port facilities, a study was undertaken with a view to determining different approaches to the privatisation of the container terminal at Port Klang. Following the study, the Government decided on the most feasible approach of privatizing the container terminal at Port Klang. In addition, a number of other areas were identified for privatization. These included the dry bulk cargo and tug boat operations in Port Klang (Fifth Malaysia Plan, 436-437).

[27] Although the Authority was named Kelang Port Authority (KPA), but the Authority commonly uses Port Klang Authority (PKA) in English as an alternative. Therefore, throughout this study, the term PKA will be used to refer the Port Klang Authority.

The proposed idea was well received by the Associated Chinese Chambers of Commerce (ACCC) which had great business interest in Malaysia. The association pointed out that there had been occasions in the past when Port Klang had been plagued by labour problems, cargo pilferage and delays. It argued that privatisation would induce healthy competition through private sector involvement in port related operations and enhance the port efficiency (Klang Port Authority, 1988: 406 – 407).

To give effect to the privatisation, the Port Authorities Act 1963 was amended as the first step to turning a public seaport into a private one. With privatisation, the government anticipated that the port would be operated more on commercial basis and provide quality services to the port users. According to Abdullah (1992; 352-352), Port Klang Authority (PKA) being a statutory body, encountered erosion over the years of its autonomy and did not have the full freedom and flexibility to manage and operate its facilities on a commercial basis. The dilemma of the Port Authority which in one hand was expected to operate as a commercial organization but on the other hand was required to comply as a statutory body with all the bureaucratic procedures of a government agency had led to a situation in which it did not have the same competitive advantage of a business unit.

However in the process of privatisation, not all facilities and services were privatised. The following entities were identified as the services for which the PKA would continue to be responsible:

(i). Fire Fighting Services
(ii). Security Services
(iii). Property Management
(iv). Port Planning and Development (Information)
(v). Port Marketing and Promotion
(vi). Pilotage Committee
(vii). Hydrography and Dredging
(viii). Training Centre (Klang Port Authority, 1988: 413).

Under the privatisation exercise, the port authority regulated both port security and safety in the port based on laws and regulations implemented by the appropriate agencies. Enforcement aspects of these activities was delegated to the privatised entities while the authority monitored the implementation part (Phang, n.d: 6). Such arrangement was to ensure that the government maintains a big responsibility on

issues concerning security because of national interest. A further explanation on this matter is given in later part of this chapter.

The privatisation of the container terminal was described as the flagship of the government's overall national privatisation strategy. Privatising the container terminal at Port Klang was the pioneer exercise in this field and the first instance in the port sector (Naidu and Lee, 1997:40) in which the same strategy swept across other ports of the world for the past twenty years (Trace, Frielink and Hew, 2009: 29). In Malaysia's case, the initiative was undertaken even before the government's overall privatisation strategy was fully streamlined (Klang Port Authority, 1988: 408).

Essentially the privatisation adopted was a 'contracting out' approach as stated in the EPU's "Guidelines on Privatization" in which it underlines;

> Privatisation can also take the form of private sector involvement in the provision of certain services or activities, but without any change in the organisational set-up of the Government agency responsible for the services. This form of privatisation essentially hives-off the responsibility for providing the existing service to a private firm, or company, or a private firm or company can be invited to provide new services or facilities to the Government (Klang Port Authority, 1988: 430).

The same approach was adopted in Port Klang by leaving a substratum of services that PKA would carry on with. The Guidelines recommended that the remaining sectors for privatisation be given to a single operator. The rationale was:

> This is because only if one company has the entire services under its control, can it control, manage and operate the services in a manner to see profits coming. If any one sector is not under the operator's control, it becomes very difficult for a private operator to set operational targets, negotiate terms with shippers and ship owners. This will also be beneficial to all LPK [PKA] staff who shall be absorbed by the single operator (Klang Port Authority, 1988: 430).

The first phase of privatisation was initiated by hiving off the container terminal to Kelang Container Terminal (KCT) which commenced operations on March 1986 (Abdullah, 1992: 357). KCT was set up in line with the provision of the Companies Act 1965. Shares were issued to PKA in return for movable assets which were acquired by KCT. The fixtures, land and fixed capital assets like wharves and berths,

were leased by PKA to KCT for 21 years under a formal agreement. PKA then issued an operating licence to KCT for the provision of container terminal services and facilities for the same 21 years (Klang Port Authority, 1988: 410).

However the most important development of Port Klang's privatisation exercise was in 1992 when the rest of the port's operational services were hived off from PKA to Kelang Port Management Sdn Bhd (KPM), which was established on 1 December 1992. In the privatisation agreement with the government, KPM had a 21-year lease to operate 22 berths in North Port and South Port, making it Malaysia's biggest port operator in terms of facilities and services (Klang Port Authority, 1988: 436 – 437).

On 18 September 2000, KCT and KPM merged as a single entity as Northport Corporation Berhad (NCB). Under the restructuring exercise, the establishment of NCB was to fuel the growth of the transportation and port services. Also the merger gave the group the ability to combine and optimize their resources and undertake further investment according to the demand and supply situation of the market (The National Maritime Portal, 2009).

As for the West Port, a new facility in Port Klang started its commercial operation in 1994. In contrast to KCT and KPM, this terminal's privatisation was 'dry privatisation' which means there were no people or goodwill assets to take over as in the North Port. The company was permitted to invite partners into lease and/or operate facilities as and when they were developed. PKA granted a licence to Kelang Multi-Terminal Sdn Bhd (KMT) to operate, manage, maintain and control the West Port operation business. KMT was granted a lease of the relevant property for a period of 30 years, on the terms and conditions as set out in the West Port Privatisation Agreement 1994 (Klang Port Authority, 1988: 449). KPM was also granted with opportunities to develop the remaining port facilities in the West Port terminal planned under the Port Master Plan 1990 to 2010 (Gateway, 2009: 12 and Trace, Frielink and Hew, 2009: 26).

Notably the privatisation exercise initiated in 1986 was a milestone in shaping the port in a better and competitive position as well as enhanced the port performance. For example, the most recent data of 2011 (Table 6.2) indicates that Port Klang performed well despite global economic glitches for the last two years. The port

continued to show a growing trend in terms of container throughput. It was reported that "in the first half of 2010, Port Klang saw a 29.3% growth in containers handled (4.3 Million TEUs)" (Gateway, 2010: 8). In comparison to 2009 where the port registered 7.3 million TEUs, the same corresponding period of 2010, the port chalked up 8.8 million TEUs, an increase of 21.4% (Statistics, Ministry of Transport, 2011).

6.4.1 **The new role of Port Klang Authority**

Following privatisation, the PKA was made responsible for aspects of the port including the port security matters. Accordingly, the Port Privatization Act 1990 (2006: 8) states that;

> The port authority shall, in addition to the powers conferred, and the functions and duties imposed upon it by any written law, exercise regulatory functions in respect of the conduct of the port activities and the running of port facilities and services in the port by licensed operators including the determination of their performance standards and standards of facilities and services provided by them and the enforcement thereof.

As a consequence of the power vested in the Port Privatization Act 1990, PKA therefore had to ensure that the private operators and port users abided by the relevant rules, regulations and conditions laid down by the Authority and the government (Klang Port Authority, 1988: 415). PKA became the 'watchdog' by requesting the private operators to furnish relevant data and statistical information relating to port operations. As such to a certain extent, the Authority would be able to assess of public benefit and attainment of government objectives to make sure all public policy objectives were honoured (Klang Port Authority, 1988: 432 - 453).

With the hiving off of port operations, PKA relinquished its traditional function as a port operator and assumed new and challenging roles which were not core activities before. Briefly, the core functions of PKA after privatisation were:

> *Port planning* – to provide a supply driven environment by identifying the need for facilities to meet specific cargo growth trends as well as ensuring fast turnaround of ships.
>
> *Trade facilitation* – to act as a catalyst by providing a conducive commercial environment to enhance the port's regional role.

> *Port promotion* – to provide utilization of the port's facilities and facilitate the development of new commercially viable trade while retaining existing ones, through maintaining appropriate levels of charges.
>
> *Environment needs* – the protection of a balanced environment while ensuring port requirements are met.
>
> *Port security and safety* – for security, the enforcement aspects are delegated to the privatised entities and the Authority monitors their implementation. For safety the Authority will ensure the navigational safety within the port limits, that all regulations and procedures for navigation and handling hazardous cargo are observed.
>
> *Performance standard* – monitoring the performance of terminal operators so that high standards are maintained.
>
> *Assets management* – to ensure the vast assets of PKA, comprising over 800 hectares of land and other port-related properties are maintained at optimum level, and to encourage the development of port-related industries within and outside the port area (Klang Port Authority, 1988: 463-464 and Phang, n.d: 6).

Additionally, to enhance port competitiveness, the government also initiated a mega project called the Port Klang Free Zone (PKFZ) by acquiring 1,000 acres of land in Pulau Indah (West Port) in 2000 in line with Port Klang's development strategy. PKA assumed the role of authority as with other functions. The primary objective of this project was to expand the logistical sector by providing a range of commercial facilities and incentives to both local as well as foreign investors. Thus the main idea was to develop a comprehensive Free Trade Zone and Free Industrial Zone centred in one location modelled after Jabel Ali Free Zone Area in Dubai (Laporan Jawatankuasa Kira-Kira Wang Negara Terhadap Projek Pembangunan Zon Bebas Pelabuhan Kelang, 2009)[28]. Between its full inception in 2006 and the end of 2007, the project had managed to attract thirty nine investors with RM729 million (USD235 million) worth of investments (The Star Online, 30 November 2007) and up to October 2007, PKFZ generated 890 TEUs from its import and export activities (The Star Online, 7 November 2007). However the project was highly criticised and

[28] A report produced by the Malaysian Parliament Public Accounts Committee on Port Klang Free Zone Development Project in 2009.

created national controversy for mishandling the public fund during the land acquisition process where the total cost was escalated from RM1.957 billion (USD631 million) to RM4.947 billion (USD1.6 billion) (Laporan Jawatankuasa Kira-Kira Wang Negara Terhadap Projek Pembangunan Zon Bebas Pelabuhan Kelang, 2009). The government has initiated legal proceedings against certain personalities to ascertain any misappropriation of public money and as of 2011, the court case was still ongoing (The Star Online, 14 April 2011, also see The Star Online 30 November 2010 and 28 February 2011).

6.5 **Port security issues**

Having undergone several stages of physical as well as administrative development, the security aspect of Port Klang needs to be viewed in a broader context. In this sense one could ask what were the measures and implications of these changes in particular the establishment of the PKA in the 1960s and the impact of privatisation in the 1980s, for Port Klang's security? Notably, however, over time the steady growth of the port in terms of its physical development as well as cargo volume and ship calls had influenced the firming up of the security of Port Klang in many respects.

6.5.1 **Legal provisions**

Until 1963 when Port Klang was still under the administration of the Malayan Railway, port security was managed by the Railway Police Force headed by an officer with the rank of Assistant Commissioner of Police with two European Police Inspectors, two Sergeants-Major, four Investigating officers, twelve Detectives and over 650 constables (Klang Port Authority, 1988: 114). The role of the railway police was chiefly to curb theft and pilferage in the port area.

The following regulations relating to safety, introduced in the 1930s, and remaining in force until Merchant Shipping Ordinance 1952, also indicate a concern to monitor the movement of small vessels in the interests of security (Klang Port Authority, 1988: 168).

Gazette Notification No. 6057, August 12, 1932, No. 17, Vol. XXIV.

In exercise of the powers vested in him by section 10 of "The Port Enactment, 1923," the Resident of Selangor hereby makes the following Ports Rules to have effect within the limits of Port Swettenham only:

1. No vessel or small craft shall lie at anchor opposite the wharves east of a line drawn parallel to the wharves half-way between the wharves and the nearest point of Pulau Lumut.

2. Small craft shall anchor only within the area which would be defined by a line drawn from a beacon on Tanjong Sungei Agas, thence to the end of the passenger jetty, thence to the end of wharves Nos. 1, 2 and 3, thence in a straight line to the port limit on Pulau Lumut at the mouth of the Langat River.

3. No vessel or small craft shall anchor in the fair-way of the mouth of the Klang River.

4. The speed of all vessels entering and leaving Port Swettenham is not to exceed six knots and is only to be increased in case of danger or when maneuvering near the wharves. When entering the port, speed shall be reduced to six knots or less at a distance of a thousand yards from the first vessel at anchor or at a buoy; when leaving the port, speed may be increased after passing the last vessel anchor or at a buoy.

5. No vessel shall proceed either to the passenger jetty or to a wharf unless signalled to do so by the Harbour Master.

10. No small craft proceeding to or from the Klang River from or to any wharf or vessel shall pass through the area contained within the following boundaries:

From the railway passenger jetty for a distance of 800 feet in line with mooring buoy No. 1; from thence on a bearing 320^{o} for a distance of 1,000 feet from thence in a straight line to a beacon carrying a white circular mark erected on the foreshore to the southward of Tanjong Kubu [G. 1581/31].

These were a small fraction of the legal regulations aimed at Port Klang security. But a significant feature was that the importance of the port for trade meant that it was declared as an 'essential' service in the Second World War. This entailed particular attention to security. Gazette Notification No. 4376 on 4 September 1939 declared certain services, as being of 'public utility, essential for the prosecution of the war and to the life of the community'. The Notification designated sixteen services as

'essential services'. Number 13 on the list was 'the Federated Malay States Railways' which covered all the operations at railway ports, including Port Swettenham (Klang Port Authority, 1988: 182).

Notification No.4376 should be viewed in the context of State of Emergency that was declared by the High Commissioner of the Malay States on 2 September 1939 followed by Emergency Regulations. The declaration of emergency was a response to the communist and other threats that posed massive challenges to colonial administration. Part IV of the Emergency Regulations titled 'Control of Ports and Movements of Vessels and Aircraft' provided for a competent authority to issue 'navigation orders' to regulate the movements, navigation, pilotage, anchorage, mooring, berthing and lighting of vessels within the harbours and territorial waters (Klang Port Authority, 1988: 182). Such safety measures also restricted opportunities for sabotage.

A subsequent Gazette Notification No. 4433 declared the dock at Port Swettenham and all land and premises as essential service. A further Gazette Notification 4434 made it an offence for any person except under the authority of a written permit granted by the High Commissioner or a competent authority, to have in his possession a camera in any such area or to make any photograph, sketch, plan or other representation of such area or any part of or object in such area (Klang Port Authority, 1988: 182).

During the Japanese occupation in Malaya from mid-January 1942 to August 1945, the regime continued to maintain railway ports as an essential service and administered them as previously with public access restricted (Klang Port Authority, 1988: 188).

After the war, with the country exposed to the communist threats, such security measures continued (further explanation on land based threats is given in Chapter Seven). Indeed, the World Bank Report of May 1954 reported that communist terrorism constituted a heavy drain on the resources of Malaya (Klang Port Authority, 1988: 260). The Protected Areas and Protected Places Act 1959 was introduced to strengthen the protection of ports as an 'essential service'. The Act declared a port as a protected area and at the same time boosted the security measures. The Act

underscored restriction measures by prohibiting any unauthorized person to be present in the protected areas. Section 4 of this Act said;

> *(2) Any person who is in any protected area shall comply with such directions for regulating his movement and conduct as may be given by an authorized officer, and an authorized officer may search any person entering, or seeking to enter, or being in, a protected area, and may detain any such person for the purpose of searching him.*
>
> *(3) If any person whilst in a protected area fails to comply with any direction given under subsection (2) then, without prejudice to any proceedings which may be taken against him, he may be removed from the area by an authorized officer.*

Further, Section 5 (1) of the Act mentions one such way to control the movement, by issuing permits where the provision said:

> (*1) If as respects any premises it appears to the Minister to be necessary or expedient that special precautions should be taken to prevent the entry therein of unauthorized persons he may by order declare the premises to be a protected place for the purposes of this Act; and so long as the order is in force no person shall be in those premises unless he is in possession of a pass-card or permit issued by such authority or person as may be specified in the order, or has received the permission of an authorized officer on duty at those premises to enter the same.*

The penalties were stated in Section 7 of this Act;

> *If any person contravenes or fails to comply with any of the provisions of section 4 or 5 or any order made thereunder or any direction given or requirement imposed thereunder he shall be guilty of an offence against this Act and shall be liable to imprisonment for a term of two years or to a fine of one thousand ringgit or to both.*

While the port is considered a protected area and restricted for public access, the Port Authorities Act 1963 as mentioned earlier empowered the authority to establish Port Security Force to maintain as well as to strengthen the good order of port. Section 13 (A) of the Act, provides the following provisions;

> *(1) The authority may, with the approval of the Minister, establish a security force for keeping order and security within any premises vested or deemed to be vested in, or in the possession or under the control of, the authority.*
>
> *(2) The security force shall consist of such persons as may be appointed under subsection 13(1).*

> *(3) A member of the security force shall have the power to arrest without warrant any person found on any premises of the authority or in premises in the possession or under the control of the authority, or any part thereof, without lawful excuse.*
>
> *(4) Every person arrested pursuant to subsection (3) shall be taken to the nearest Police Station as soon as possible.*
>
> *(5) Any rules made under section 15 shall unless expressly excluded therein apply to members of the security force established in this section* (Port Authority Act 1963, 2006: 20).

The data generated in this research demonstrates that the government is increasingly concerned on the need to secure the port and most importantly its relation to national security interest before 9/11. Overwhelming evidence on this issue was confirmed by two senior officials responsible in policy making by mentioning:

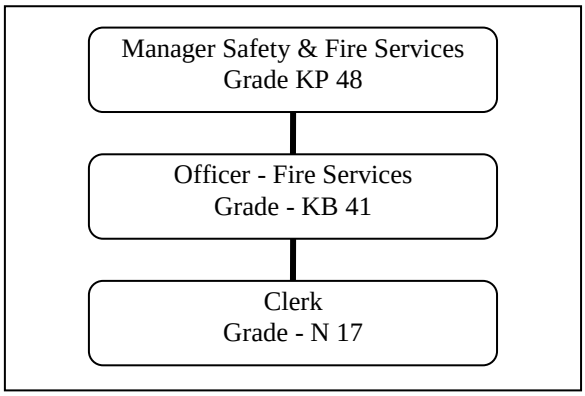
> Even before 9/11, we already considered the port as one of security area. In fact our ports are already fenced up way back many years for the national interest. For the national interest all the exit and entry point, port is one of those. So the ports are fenced up. There is also security force by the port authority before the ports are privatised. So the ports are already secured area. In fact it is a no entry zone (Interview Code: 02).

And

> In Malaysia even if 9/11 not happened, we already established our port security. Certain port has been gazetted as protected area under the national committee on protected area act. So it was well prepared. Even though if there is no 9/11, whatever it is we are prepared. 9/11 is just catalyst and strengthened our security (Interview Code: 04).

In this connection we could view from Figure 6.1 of the organisational chart shared by the person responsible for security in PKA that PKA established a small workforce to manage both security and fire services in the port since its privatisation in 1986 until 2008. The small number of employees is due to its regulatory function where the enforcement has been assigned to private entities.

Figure 6.1: Organisational Chart of the Security Department, Port Klang Authority (1986-2008)



Source: Compiled from Interview Code: 17

Pertaining to the issue of port security provision as enshrined in Port Authorities Act 1963, power is granted to all port authorities of Federal ports including Port Klang to appoint Auxiliary Police. The auxiliary police power essentially comes under the purview of the Royal Malaysian Police (RMP) in the Police Act 1967. Part IX, Section 47 of the act gives the following proviso:

> *(1) The Inspector General may, with the concurrence of the Minister, appoint or promote any person to serve in the Auxiliary Police as a senior auxiliary police officer with the honorary rank of Superintendent, Deputy Superintendent, Assistant Superintendent or Inspector, and may prescribe the area in which he shall serve.*
>
> *(2) A Commanding Officer or any police officer authorized by him in that behalf, may, with or without written engagement, appoint or promote any person to serve in the Auxiliary Police as a junior auxiliary police officer with the honorary rank of subinspector, sergeant-major, sergeant or corporal or as an auxiliary police constable, and may prescribe the area in which he shall serve.*

The police force is obligated to perform such auxiliary duties in connection to their duties stipulated in Section 20, sub-section (3) (e) of the Police Act 1967 in which it states;

> *Giving assistance in the preservation of order in the ports, harbours and airports of Malaysia, and in enforcing maritime and port regulations*.

To fulfil a proper enforcement, the RMP in turn delegated the auxiliary police power to the port authority to exercise policing duties in port facilities in line with the government's measure to protect the port under the Protected Areas and Protected Places Act 1959. After the privatisation, the police power was still retained under the PKA's responsibility. This has been verified with the person in charge of security matters in PKA where the respondent confirmed that:

> My knowledge is only for Federal ports. Whether you go to Bintulu, Penang, PTP, Kuantan, you will find same kind of security standard being maintained. And all the ports, they have auxiliary port police. They do not employ company ABC from outside where old man sitting down with stick is not the case. All ports have the auxiliary police and the thing about the auxiliary police is that they have AP which is Auxiliary Power which has been handed down by the RMP of Bukit Aman…because PKA is the body which has been given the authority by the RMP. Now the ports have been privatised, but they have auxiliary powers and there are security people to report to us. And you will find it all the Federal ports in same standard. This is all prior to 9/11 (Interview Code: 15).

In this sense, while PKA holds the responsibility of auxiliary police power as empowered by RMP, the enforcement of policing duties at the privatised terminals is conducted by the private companies (Northport and Westport) with same auxiliary police power delegated by the port authority. However, the employment of security personnel in both Northport and Westport is the responsibility of the respective terminals. As of 2010, Northport's police strength was 197 (Northport presentation, 2010) and Westport was 208 personnel (Westport presentation, 2010). The breakdown of auxiliary police force of both terminals is illustrated in Table 6.5. These forces then perform security duties with police power. Such arrangement requires the privatised companies to collaborate and report their progress any matters concerning the application and practices of police powers in the port to the PKA (Interview Code: 15 and 16). In addition to this, the terminals also forged a close collaboration and report serious crimes to RMP, Officer in Command Police District of Klang (Interview Code: 23)

Table 6.5: Number of Auxiliary Police Force in Northport and Westport - 2010

Northport		**Westport**	
Rank	No of Personnel	Rank	No of Personnel
Senior Manager	1	Senior Manager	1
Manager	1	Manager	6
Asst. Manager	2	Executive	4
Executive	9	Other Rank & File	187
Officer	13	Civilian Staff	8
Rank & File	171	Administration	2
Total	**197**		**208**

Source: Compiled from Northport, 2010 power point presentation and Westport, 2010, power point presentation

To give further effect to the auxiliary police in relation to Police Act 1967, the Police (Auxiliary Police) Regulations, 1970, which came into force on 1 July 1970, ensured that the auxiliary police in port performs duties in tandem with normal police force as stipulated in section 5 of the regulation;

> *(1) A member of the Auxiliary Police when performing police duties shall have the same powers and duties and shall be subject to the same authority as a police officer of corresponding rank.*
>
> *(2) A member of the Auxiliary Police shall be subject as far as possible to the same discipline as a police officer of the corresponding rank.*

With regards to person under employment performing police duties as a member of Auxiliary Police, Section 6 of the same regulation states;

> *(1) Where any person under an employment of any other person or body of persons (hereinafter referred as "employer") is appointed as an auxiliary police officer or constable to perform police duties in an area under the control of the employer, such employer shall be responsible for-*
>
> *(a) supply of uniforms, badges, arms and ammunitions;*
>
> *(b) providing such suitable guard-room, armoury and defence works as may be considered necessary by the Commissioner or Chief Police Officer of the State in which the area situates; and*
>
> *(c) payment of compensation to any auxiliary police officer or constable who had died or injured during the course of performing police duties.*

Notably, the Regulation underscores that the auxiliary police is not only carrying weapons and granted power to investigate and prosecute but at the same time Section 13(A) 3 of the Port Authority Act 1963 has given power to port security officers to arrest any person without warrant who breaches security. This type of provisions, allowed the port police to perform strict security measures in the port. This was further approved by the head of the security unit in one of the terminals who said:

> Our [security] is unique. We have police powers which others don't have. What ever they catch must give it to police outside. They cannot deal with effectively. In other countries, they have coast guard and inside there is security. The security won't carry much power. They arrest and hand over [to police]. Ours are very stringent. We investigate and we charge them in court. That is why ours are very different form. We also carry gun like the police. We are carrying the authority card exactly like the police. I have the rank of the DSP [Deputy Commissioner of Police] (Interview Code: 23).

With the establishment of auxiliary police, Port Klang was generally well prepared in port security much earlier to 9/11. This has to be viewed in connection with the historical fact where the measure put in place was rather a proactive rather than reactive as opposed to what have been witnessed in the aftermath of 9/11.

Notwithstanding the port police was established in accordance with the provision of Port Authorities Act 1963 and at the same time it was earmarked as essential services, the port passes that are issued as a measure for access control are placed under the responsibility of Chief Government Security Office (CGSO) an agency under the Prime Minister's Department. This is because CGSO is one of the agencies mandated to enforce all essential services under the Protected Areas and Protected Places Act 1959. In this connection, the port police who hold the police power monitor the movement of every person and vehicle through port passes as conditioned by the CGSO. Interestingly however, the port pass requirement for the port workers was introduced in Port Klang much earlier than the US introduced Transportation Workers Identification Credential (TWIC) as part of the security measure in response to 9/11 incident as pointed out in Chapter Four. Nonetheless the main difference is, TWIC which is issued by the Transportation Security Administration (TSA) under the DHS is to ensure that any individual or merchant mariner seeking unescorted access to a secure area of maritime transportation facilities and vessels holds a TWIC. For this purpose, TSA together with the USCG have endeavoured to register approximately

1.2 million transportation workers in the US by using biometrics system. These workers generally have access to ports in various capacities. As such the measure adopted a rigours background check before a card is issued to a worker (Lord, 2008: 2-3). However, Port Klang did not implement the same standard or similar type of practice as the US, but its effort suggests that Port Klang's access control has been considered with security features much earlier in an effort to secure the port.

Under the essential services requirement, CSGO also conducts an auditing in port with a committee comprising of State Security Council and the Police. The auditing process is performed annually with their own standard set of requirement.

Another security initiative that provides supporting measure for the port is worth noting at this juncture. To ensure a proper running of the port during any form of situational crisis or natural disaster, the government established the 40th Regiment in 1963. It is a special unit from the Reserved Army and placed under the Armed Forces institution. Since establishment, the unit is still active until now (2011). The 40th Regiment recruits and trains the port workers on voluntary basis and prepares them to run the port operations in the event of any crisis that jeopardy the port. Although the recruitment process is voluntary, only those workers who are physically fit and free from criminal activities will be given an opportunity to join. However, the recruited port workers are not eligible to become auxiliary police officers, as the main focus of the Regiment is to run the port operations during any major crisis. As a form of encouragement all these volunteers are provided uniform and training allowances. Training usually conducted two weeks in a year. A similar kind of voluntary army was also created to other three main essential services namely railway, water and electricity ((Kertas Cadangan Penyusunan Semula Perjawatan Regimen Pangkar Pengendalian Pelabuhan Ke 40 Regimen Askar Jurutera Diraja - Askar Wataniah) (Proposal Paper for Restructuring Exercise of the Position of the 40th Regiment Engineering Corps - Reserved Army) 2010 and Interview, Code: 03)).

Despite the fact that Malaysia is no longer intimidated by communist threats, such protective measures for ports as 'essential services', including the volunteer force, continue up to the present (2011) and are not just confined to Port Klang but apply to several strategically located seaports, airport and other utilities all over the country. In

this respect, even though Port Klang has been privatised, the service of 40th Regiment still maintained for the purpose of national interest. This reflects that the Malaysian government had tried to instill security awareness and practices way back to 9/11 in contrast to noticeable change of attitude and practices emerged in most part of the world in response to 9/11 attacks.

6.5.2 **Security situation in Port Klang**

In terms of security situation or threat in Port Klang before 9/11, the perception was Port Klang encountered more common threats as with any other ports in different parts of the world. As one respondent from the Marine Department asserted;

> Before 9/11, the situation of port in terms of security was similar onboard ship during that time. We could say, we concentrated on issues of theft, smuggling, there is no cases of threats from any form of terrorism or piracy (Interview Code: 07).

Views from the private stakeholders are also worth considered at this point in which the person charge in security affairs at a terminal observed;

> Before 9/11, basically you must understand Malaysia's threat scenario, you can't expect something like that of other countries where we have terrorist threat all this things. We don't have that. Very peaceful country. I'm very qualified to say that because I came from the intelligence. So when we talk about pre-911 in context of port, there is actually no serious security threat. What we have is of course, we wouldn't call it a big security threat, but petty theft and smuggling. There is always attempt because smugglers leave within the container business. These are the two things. Petty theft as well as smugglers (Interview Code: 23).

Closely related to this view, a senior official with twenty-year's experience in a shipping line pointed out;

> Basically the security measures in Port Klang that I can see before 9/11, I can see that the area of Port Klang was very well cordoned off; fences are there, barb wires are there. The security of personnel in Port Klang itself is there. They already implemented these security measures even before 9/11. The people who access to the area will also be controlled. The proper implementation of the equipment and maintenance of equipment for example, CCTV might not be there. I don't think so there was CCTV (Interview Code: 28).

In terms of access control, despite Port Klang was observed a close port system prior to 9/11, yet in certain situation there was some flexibilities provided to the public. This was evidenced from a response given by one respondent who takes charge in port security in PKA. The argument was;

> Before the 9/11 days, public we allowed after first line of scrutiny. Of course we check why they come onboard, why coming into the port, what is their business, most of the time. The public come into the port is to visit crew members onboard. Or they come to visit their guest something from the passenger ship. Otherwise the public really don't have any business in the port…The public really coming to the gate is very minimal in those days.

In summary, although the security threat in Port Klang is perceived to be minimal which is very much confined to internal threats related thefts and smuggling before 9/11, Port Klang's proactive security measures however, perceived to be tight, not just for the interest of the port alone but also for the national economy and national security as well.

6.6 **Conclusion**

The establishment and development of Port Klang physically, geographically and in terms of policy, ownership and management have been analysed from an historical perspective. The port developed from a couple of jetties at the riverside of Klang but today it stands as a national premier port. It evolved over time until it reached its current position (2011) as the thirteenth leading container port in the world in terms of its container throughput (UNCTAD, 2011: 89). Its separation from the railway administration in 1963 and the privatisation measures initiated in 1986 have contributed to a massive transformation in modernising the port with the state-of-the-art equipment. During the process of port development however, there were cargo leakages to Singapore port due to Singapore's strategic location with good services and lower transaction cost. The government subsequently formulated additional policies to offset those drawbacks. The outcome of the NPP study which was carried out with the support of the World Bank had contributed some positive results for the development of national ports. The recommendations of the study encouraged the government to formulate additional measures such as the load centering and supply driven policies that have further strengthened the Port Klang's competitiveness. These were highlighted in different five-year development plans and mid-term reviews.

Further, as a result of privatisation, the governance of the port has changed, with the role of the Port Authority totally different to the case in the past.

Significantly, it has been shown that security is not a new element for Port Klang if one were to refer to its long progress. Even before the responses to 9/11 outlined in the earlier chapter, as a response to military needs and earlier terrorist threats, Malaysian ports were subject to considerable security measures. In this respect, the Protected Areas and Protected Places Act 1959 served as an excellent legal instrument in protecting the port by categorising all key ports as an 'essential service'. By doing so, the act underscored restriction measures by prohibiting any unauthorized movement by person or vehicle in the protected areas and hence boosted the security level of the port. While the port is protected under this restrictive measure, the Port Authorities Act 1963 empowered the authority to establish the Port Security Force to further strengthen the good order of the port.

However following the privatisation process there appeared to be a greater conflict between commercial and security needs. There are more stakeholders than in the past with the presence of private entities. Furthermore, the privatisation exercise not only required private participation but simultaneously required the port to establish port police as enshrined in the Port Privatization Act 1990. The responsibility of port security was retained under the Port Authority together with its role as landlord and regulatory body and the PKA shouldered the main Auxiliary Police powers empowered under the Police Act. Under this circumstance, one of the challenges for the PKA was to monitor and takes the full responsibility upon its delegation of Auxiliary Police powers to the private operators to establish port police in their respective terminals (Interview Code: 17). Interestingly however, the port police were given the same police power as the normal police force. This allows carrying guns and power to investigate and prosecute, as well as to arrest any person without warrant who breaches security within the port area. To further safeguard the port, the government established the 40th Regiment in 1963 and trained the port workers voluntarily who are not in the port police force to operate the port in the event of any major emergencies. All these security measures suggest that the Malaysian government adopted a rather more proactive than reactive approach in handling port security matters. Although Port Klang's security situation before 9/11 was under

control and only encountered common threats, such as thefts and pilferage, as with any other ports in the world, Malaysia was well prepared in terms of port security much earlier than the 9/11 attacks. With the explanation of security arrangements before 9/11, the next chapter (Chapter Seven) elaborates in detail Port Klang's security initiatives and policies after 9/11.

CHAPTER SEVEN

PORT SECURITY MEASURES AFTER 9/11 IN PORT KLANG

7.1 Introduction

Having considered some security measures before 9/11 in Port Klang where its gradual development and historical background provided a basis for various initiatives, this chapter examines the security situation in Malaysia in general and Port Klang in particular. This includes the initiatives introduced in the post 9/11 era by showing how the security policies were translated into action. In addition to this, the chapter also elaborates the institutional and organisational arrangements as well as international and the US unilateral measures.

7.2 Security threats to Port Klang and surrounding waters

In view of Port Klang's position in close proximity to the SOM, naturally the sensitivity of the location and associated security threats need to be viewed in this context. Several studies (Ja'afar, 2007, Nik and Permal, 2008, Nik, 2009, Khalid, 2009) have highlighted the significance of the SOM. The SOM are vitally important for socio-economic and political prosperity and stability for the ASEAN region and this in turn greatly influences the littoral and other user states concerns to safeguard access to the water, but conversely the Strait exposes them to various maritime security threats. According to Nik and Permal (2008: 190) there are two major types of security threats in the SOM, traditional and non-traditional. The traditional threats mainly relate to maritime boundary disputes and naval clashes, whereas the non-traditional threats arise from various criminalities such as piracy, armed robbery and smuggling.[29]

The data collected for this study has lent support to this identification of the type of threat. The interviews supported Nik and Permal's (2008) argument. The main threats are people smuggling, human trafficking, smuggling of drugs, weapons, cigarettes and other contrabands, illegal immigrants and illegal fishing.

[29] There are several maritime boundary disputes yet to reach a compromise stage or resolved among the regional states. One such persisting case is the claim for Spratly Islands by six countries. See The Star online, 18 June 2011, "Malaysia wants Spratly issue resolve wisely, says Ahmad Zahid".

Many of the threats in the SOM are related to maritime security, which covers a much bigger scope than port security. In a broader context, however, there is a connection. Crimes perpetrated at sea, such as armed robbery and the smuggling of humans and arms, may have implications for port security.

Table 7.1 below shows the incidence of maritime crimes in Malaysian waters from 2006 to 2011.

Table 7.1: Vessels Arrested for Various Offences in Malaysian Waters – (2006 – 2011)

Crimes	2006	2007	2008	2009	2010	2011
Vessels arrested– without document/permit	114	512	504	738	898	604
Encroachment of foreign vessels	37	89	82	137	102	69
Smuggling	19	50	54	58	131	127
Illegal immigrants	3	39	38	96	191	80

Source: Statistics, Malaysian Maritime Enforcement Agency, 2011

The data generally demonstrates that there is an increase in the number of various types of maritime crimes each year especially cases related to vessels arrested without permit, smuggling and illegal immigrants. As the scenario suggests that a greater enforcement measures have been undertaken by the government, on the other hand, it reminds the policy makers of the challenges to contain the situation in the Malaysian maritime sector as a whole.

In this regard, despite the fact threats in the Malaysian waters are not directly related to terrorism, the information from interviews provides a further insight into perceived or anticipated threats in the Malaysian waters, specifically in Port Klang's environment. Responses from senior officials from the NSC and Marine Department to the question "what were the perceived or anticipated threats in the port environment after 9/11" suggest that terrorism does not feature among fears of crime:

> Threats at the moment are like we can read in the newspaper, armed robbery at sea. Recently we have heard marine accidents, smuggling and illegal fishing. About terrorism, there is not so much (Interview Code: 04).

And

> There is none [terrorism] in Malaysia. The most common one nowadays are the unauthorised access and they do pilferages and theft in the port like stealing steel bars. It's more on the normal crime and stealing in the port. There are no cases of attempts to sabotage our ports (Interview Code: 08).

And

> In my experience I haven't heard of piracy and terrorism in Port Klang. The only thing is tampering with the cargo. They break and steal the cargo or there are cases of smuggling. They also brought in prohibited items (Interview Code: 09).

These responses further indicate the reality that, in relation to Port Klang's situation in particular, the main threats are traditional threats that commonly experienced in most ports of the world (Ellen, 1993). This was clearly affirmed by a PKA respondent who attached to this organisation for seventeen years:

> Basically the threat here [Port Klang] is pilferage. In terms of incursion or people who infiltrate into the port are the petty fellows. They come in for theft or commit pilferage or petty theft. We don't have any big timers coming in. But of course we have found out there are lot of economic crimes taking place in the port where sometimes you find undeclared cargoes moving out from the port (Interview Code: 16).

From a practical point of view there is no difference in the degree of these long-established challenges to port security since 9/11. Table 7.2 below shows that traditional port crime remained a problem in Port Klang. However at this stage, I could not demonstrate any specific data before 9/11, as the same PKA respondent above (Interview Code: 16) mentioned that "we [port authority] don't keep the record." But he asserted "this [port crime] happens all the time". Generally this suggests that in spite of strict security measures in Port Klang even before 9/11, the 'traditional' port crimes have not been eradicated in totality. On this perspective, Tschirgi (2007: xv) rightly points out "…full security was unattainable; that the search for security is necessarily a multifaceted and ongoing process which can never be capped by definitive, enduring success".

Table 7.2: Theft and Pilferage in Port Klang – (2006-2011)

Year	Theft and pilferage incidents - Port Klang (Westport)
2006	20
2007	15
2008	17
2009	26
2010	21
2011	30

Source: Statistics, Westport, Port Klang, 2011
Note: This data is only available in Westport of Port Klang. There is no data available for Northport

Cargo theft is a serious problem in Malaysian ports. According to the US-based watchdog, Transported Asset Protection Association (TAPA), almost RM70 million (USD22.6 million) worth of cargo was reported stolen in Malaysia in 2010. Although this amount includes both the seaport and the airport, TAPA's ranking puts Malaysia in the list of countries like Mexico, Brazil and several Eastern European countries where cargo thefts are common (Khalid, 2011: 1-2).

However piracy and armed robbery, which traditionally posed a major concern for safety and security of navigation for both users and littoral states of the SOM, have clearly declined in the recent past, as shown in Table 7.3.

Table 7.3: Piracy and Armed Robbery Incidents in the Straits of Malacca - (2000 – 2011)

Year	IMB
2000	75
2001	17
2002	16
2003	28
2004	38
2005	12
2006	11
2007	7
2008	2
2009	2
2010	2
2011	1

Source: ICC-IMB Piracy and Armed Robbery Annual Report, 2000, 2004, 2010 and 2011

This decline has been attributed to several factors. These include: the improved situation following the peace agreement between the Indonesian government and the terrorist group of Gerakan Aceh Merdeka; national and regional responses with increased patrolling and surveillance; tighter government controls and local policing onshore and greater awareness of the implementation of multifarious security regimes (Bateman, 2010, 742-743).

Bateman (2010: 1-3), asserts that with the overall improvement of piracy cases in SEA and South Asia, regionally the problem has shifted to the southern part of South China Sea, with by far the greatest concentration now centred off the Horn of Africa and Red Sea perpetrated primarily by the Somalian pirates.

One feature of the SOM, as noted in Chapter Five, is a large number of barter trade vessels plying between the Malaysian Peninsular and Sumatra along the SOM. Small vessels are not only considered to pose a danger for safe navigation but possibly could be used as a vector for inflicting catastrophic damage by ramming targeted vessels, as in the case of *USS Cole* and *Limburg*, or other maritime assets. Albeit barter trading has been a traditional business since the 15th century and still continues, it has been suggested that Non-Convention Vessels (NCVs) pose safety and security dangers as their trading is currently under-regulated (Mak, 2010: 37).

Respondents from the Marine Department and PKA were asked specifically whether "there are any threats from small vessels operating from small jetties especially from barter trade jetties". This question prompted some conflicting replies. An officer in charge of the ISPS Code implementation in the Marine Department responded:

> In terms of security threat that commonly happens in Port Klang for example, when the ships are in the port, barter trade vessels and fishing vessels, normally pass through big vessels while engaged in cargo operation. It increased the security threat actually. (Interview Code: 09).

Another respondent who is in charge of port and seamen affairs from the same department, however, held an opposite view, claiming that such type of vessels are not a major threat for the Malaysian maritime sector. He said:

> For the time being, I could not see there is any form of threat. Between Malaysia and Indonesia for the barter trade purpose, it is point to point. We know their situation there. Malaysia and Indonesia is more or less like brothers. There is no suspicion or threat between them. It is different in international port. We do not know where the threats are coming from. Like barter trade is very special. It is like we know each other. They are depending on each other for their business survival. So, threat is almost zero (Interview Code: 07.)[30]

Against this is the view of a senior official of the PKA who involves greatly in security matters. He considered that:

> Barter trade is still a problem in a sense that, barter trade vessels are not licensed by Malaysia. It is actually by the Indonesian government. Barter trade vessels are small vessels. They are about thirty meters long; most of them can carry about 500 tonnes of cargo or less than that. Some of these guys are really quite distressful looking, very sad to look at them. You will be surprised how they all can be licensed to carry cargo between Malaysia and Indonesia…these guys are so pathetic they don't even have VHF onboard. They actually come here, they don't do any reporting. They just come straight into the port. So who are going to control these people? We are not concern about these people. We give permission to come. I don't know who give them permission. Until today I'm still in the dark who gave them permission to come in to the port (Interview Code: 16).

Another senior official responsible for implementing the ISPS Code, noted possible wider implications expressing the view that "yes, absolutely there are potential threats. Most of the small jetties [are] located within the region of MTSO" (Interview Code: 08). Someone else argued that "in the Malacca Straits, especially between Port Klang and Malacca we see very much smuggling activities than anything else. It can be used as opportunities to inflict danger to vessels in harbour and vessels along side" (Interview Code: 14).

Even so, albeit there was a notion of danger from small vessels, one respondent claimed that Port Klang did not encounter any bad experience from these "…because there is marine police in our area, we have lot of departments looking after the security matter. Our port police will secure up to few meters away from the wharf" (Interview Code: 24).

[30] Historically Malaysia and Indonesia established a closed relationship for centuries due to regionalism and sharing of longest maritime and territorial borders. This was clarified by Tan Sri Razali Ismail who has been in the Malaysian Foreign Service for 40 years. See the detail in The Star Online, 24 July 2011, "Dynamics of Malaysian-Indonesian bilateral ties".

Bateman's argument, and the evidence of Table 7.3, counters the claim by Banlaoi (2005: 63), a security expert who wrote in 2005, that "Southeast Asia is fast becoming the world's maritime terrorism hot spot, because of a very incidence of piracy and burgeoning threat of terrorism…the growing nexus between piracy and terrorism makes maritime terrorism in Southeast Asia a regional security concern".

Nik (2007: 14) also against Banlaoi's (2005) view, comments that "it is a myth that scourges of piracy and terrorism are intertwined because terrorism has not spilled any blood in the Straits of Malacca". He asserts that it is impossible for Southeast Asian terrorists to cause catastrophic damage to the passageway. Arguably if the Straits were crippled, ships could temporarily resort to alternate routes around Lombok or even South of Australia. He concludes that in reality the risk of maritime terrorism in the SOM is very low. In line with this, Teo (2007: 546) argues that Malaysia was reluctant to believe there was any credible evidence to suggest a relationship between piracy and terrorism and therefore considered the possibility of any terrorist attack in its water very remote.

It is noted shown in Chapter Three that the 9/11 event aggravated the fear of maritime terrorism. This fear had been amplified across the globe which eventually led to the imposition host of security regimes and additional vigilance. It can be argued, however, that the level of threat was exaggerated (Metaparti, 2010: 723). It is of relevance to highlight here that twenty-eight individual respondents who participated in this research comprising both government and private sector, disputed that any form of terrorism threat exists in the vicinity of Port Klang waters, so supporting both Nik (2007) and Teo's (2007) opinion. This perception of maritime terrorism as not a serious risk was accentuated by the Home Minister himself when said in May 2011 that "Malaysia has never been a target of any terrorist movement or militant group so far…as of today, there is no real concern that Malaysia is a target" (The Star online, 3 May 2011).

The general view is that Port Klang's strategic position facing the SOM has not made terrorism the risk envisaged by the US and its western allies. The primary concern is other types of maritime crime which takes place in the close vicinity of port as well as outside the port area as evidenced in Table 7.1 and 7.3. One such threat is armed robbery. Despite piracy no longer being a significant issue in Malaysian waters, the

IMB has reported cases of armed robbery while ships have been berthed and anchored in the port area. There are 5, 7, 11 and 7 cases registered in Malaysia in 2008, 2009, 2010 and 2011 respectively (ICC-IMB Report, 2008, 2009, 2010 and 2011). In addition to ships, there are also reported attacks on ports in Malaysia. Four incidents were registered in 2004 and 2009 respectively in Sandakan (ICC-IMB Report, 2006 and 2009. This was further confirmed by the head of the Marine Department who said:

> [In] Port Klang there is no threats at all. If you look at the IMB report, annually maybe we have a few incidents in Bintulu, Sandakan, where vessels are anchored have been boarded and things have been stolen. These are armed robbery. They go to the ship's crew, they board the ship, take the valuables and leave the ship (Interview Code: 05).

7.2.1 **Land based security threats**

While maritime terrorism is viewed as of low risk, land-based terrorism has been a big threat in Malaysia since the colonial period as noted in the preceding chapter. It started with communist terrorism from the Communist Party of Malaya in 1948 which aimed to spread communism and establish a communist state in Malaya (Bakashmar, 2008: 480). This group was also known as the Communist Terrorist Organisation by the Malaysian security forces and the colonial regime. In response to this threat, the British regime declared a state of emergency but lifted it in 1960 after Malaya gained its independence (Hussin Shah, 2006: 115-117). However the group was officially crippled though a peace deal between the governments of Malaysia and Thailand in 1989. Subsequent to this threat, there were many other terrorist threats stemmed internationally and domestically. Though the international effect was not so serious, the domestic one is considered perilous as the terrorists operated as home grown militant groups which started in the 1960s and affiliated with Al-Qaeda group. Their ultimate motive is to establish an independent and sovereign Islamic state (Hussin Shah, 2006: 112-114). Arguably the concept of global terrorism trend espoused by Robertson (2007:114) could well be related in this context. He highlights that throughout history terrorism has operated in cycles. However after decades of nationalism and self-determination movements, terrorists seem to have returned to religious motivations in the 21st-century.

The religious extremism in fact posed a bigger challenge to Malaysia's national security. In order to mitigate such form of extremism a general policy on terrorism was stipulated in the NSC Directive No. 18 that outlines key principals as follows:

(i) to oppose all form of terrorism
(ii) to protect the lives of hostages or possessions
(iii) to find a solution by negotiation
(iv) not to exchange hostages as a means of resolutions
(v) to agree to assault operations as the final choice if negotiations fail (Hussin Shah, 2006: 276)

As the NSC Directive provides a guideline and does not contain any legal binding force, the draconian legislation, Internal Security Measure Act 1960 (ISA) or Act 82 grants full legal power to the government to arrest and detain any suspected militant that poses threat to national security. Seen as a preventive rather than punitive law, ISA allows the police to arrest individuals without warrant that threaten peace and security and held for 60 days for investigation (Hussin Shah, 2006: 276-277). After 60 days the Home Minister as of Section 8 of the act can issue order a two year detention which states;

> *(1) If the Minister is satisfied that the detention of any person is necessary with a view to preventing him from acting in any manner prejudicial to the security of Malaysia or any part thereof or to the maintenance of essential services therein or to the economic life thereof, he may make an order (hereinafter referred to as "a detention order") directing that that person be detained for any period not exceeding two years.*
>
> *(2) In subsection (1) "essential services" means any service, business, trade, undertaking, manufacture or occupation included in the Third Schedule* (Act 82, 2006:17-18).

One of the components listed in the Third Schedule of this act incorporates essential services by taking into account port, dock, harbour services and undertakings (Act 82, 2006: 69). Notwithstanding the act has been used for many extremist cases including for political reason, according to Hussin Shah (2006: 277-278) the arrest of twenty-five members of Kumpulan Mujahidin Malaysia (KMM) and 93 JI members involved in religious terrorism in 2004 was a good example of how the act brought into force in

maintaining law and order.[31] This is further evidenced in the arrest of Abdul Haris Syhuhadi under the same legal instrument for suspecting involved in terrorist activities on 7 June 2011 (The Star Online, 7 June 2011). Although one respondent who is involved in policy advice argued that ISA gives the right to government to arrest whether or not the person poses a threat at sea, land or air, thus far it has never been used in the maritime sector (Interview Code: 29). What is obvious in this perspective is that the origin of numerous illicit activities at sea has some connection at land too (Mejia, 2009: 12).

Generally, terrorism studies (Vaughn, et.al, 2008, Robertson, 2007 and Levin, 2006) demonstrate that extremists operate covertly on the land side. If the government overlooks this, the perpetrator could pose a potential threat to port security as well. With this reference, an unnoticed development among the university students involving both locals and foreigners alarmed the authority and challenged the level of national security. There were some reported cases where foreign students who came to Malaysia started brainwashing the local university students with an intention to turn into extremist. The JI terrorist group has been found in recruiting the Malaysian university students to participate in *jihad* (holy war) (The Star, 18 June 2010). This has prompted the Malaysian Prime Minister, Datuk Seri Najib Tun Razak to issue a statement which states "we need to alert all the time as recruitment of students into extremist and militant groups from taking root in the country…those recruited will be influenced to participate in terrorist activities for certain objectives" (News Straits Times, 17 June 2010). Although the Home Minister assured that there is no serious terrorist threat in the country particularly affecting the maritime sector, the Prime Minister's view however, indicatives that there is a possibility of such menace endangering the country.

In analytical point of view, this type of incident provides a practical example of what Robertson (2007: 14) argues that terrorist typically recruits young educated people to

[31] Due to public outcry that the ISA is an arbitrary law and it also been abused in the pretext of national security for political reason to silent dissenting voices against the government and infringes a person's right to a fair trial (The Malaysian Insider, 7 June 2011), eventually prompted the government to repeal the Act and replaces with two new acts, deemed suitable and provide a balance between individual rights, civil liberty and safeguards the public order. (The Star Online, 16 September 2011, The Star Online, 25 December 2011 and The Star Online, 12 March 2012). As a first step to do away with the ISA, the Parliament tabled a new Bill called the Security Offences (Special Measures) Bill 2012 for first reading on 10 April 2012 (Star Online, 10 April 2012).

fight for social inequalities and injustice and seek ways to correct the imbalance. He further points out that "higher education might in fact make potential terrorists more aware of and sensitive to discrimination and inequality…terrorism is an occupation for the young, the idealistic, and the naïve. Most terrorists either recruits or volunteers, tend to be in their 20s" (Robertson, 2007: 14).

Correspondingly, a senior official from an enforcement agency stated "the recent incident of terrorism in universities is another indication that it started there and not in villages. You need to control the educated people than the villagers" (Interview Code: 13). This view implies that these extremist would easily spread their influence through any means and possibly target any weakest link along the supply chain. However another official who involves heavily in policy making denied that this issue has any direct consequences for port security, yet believed that "if they want to pose a threat, they pose a threat anywhere and there is heightened tension in the country given recent developments" (Interview Code: 29).

Nevertheless, port security is embedded within a transportation system involving various modes (rail, air, water and road). Since the movement of goods and people increasingly relies on the intermodal system, with a container transferring many times in the course of its journey (Szyliowicz, 2004: 355), any carelessness would have a profound implication for ports if extremism on the land side went unchecked. The comment made by one respondent who provides policy advice to the government is worth mentioning here. He said:

> Terrorism is the future challenge. It can happen if it is unchecked. Because like I said, if no matter how best the system you put in, there are ways and means for terrorist making into the country by various means by onboard of the vessel, by plane, or they smuggle themselves into the country. Even today if you notice [that] people from Afghanistan coming into KLIA [Kuala Lumpur International Airport] and suddenly they disappear. They came in without going against our law. And when they landed in Malaysia through tourist visa, they then disappear (Interview Code: 03).

In overall perspective in connection to land based security threats however, the Prime Minister Datuk Seri Najib issued a new statement on 3 February 2012 by assuring that terrorist threat has been contained well in the country. He mentioned:

> Terrorism has failed to find a footing in Malaysia because of pro-active and pre-emptive measures taken by authorities to weed out those with extreme beliefs…those with militant ideologies would have to "practice' their belief elsewhere, thanks to the government's strict control. This is one of the reasons why there are no serious terrorists in the country (The Star Online, 3 February 2012).

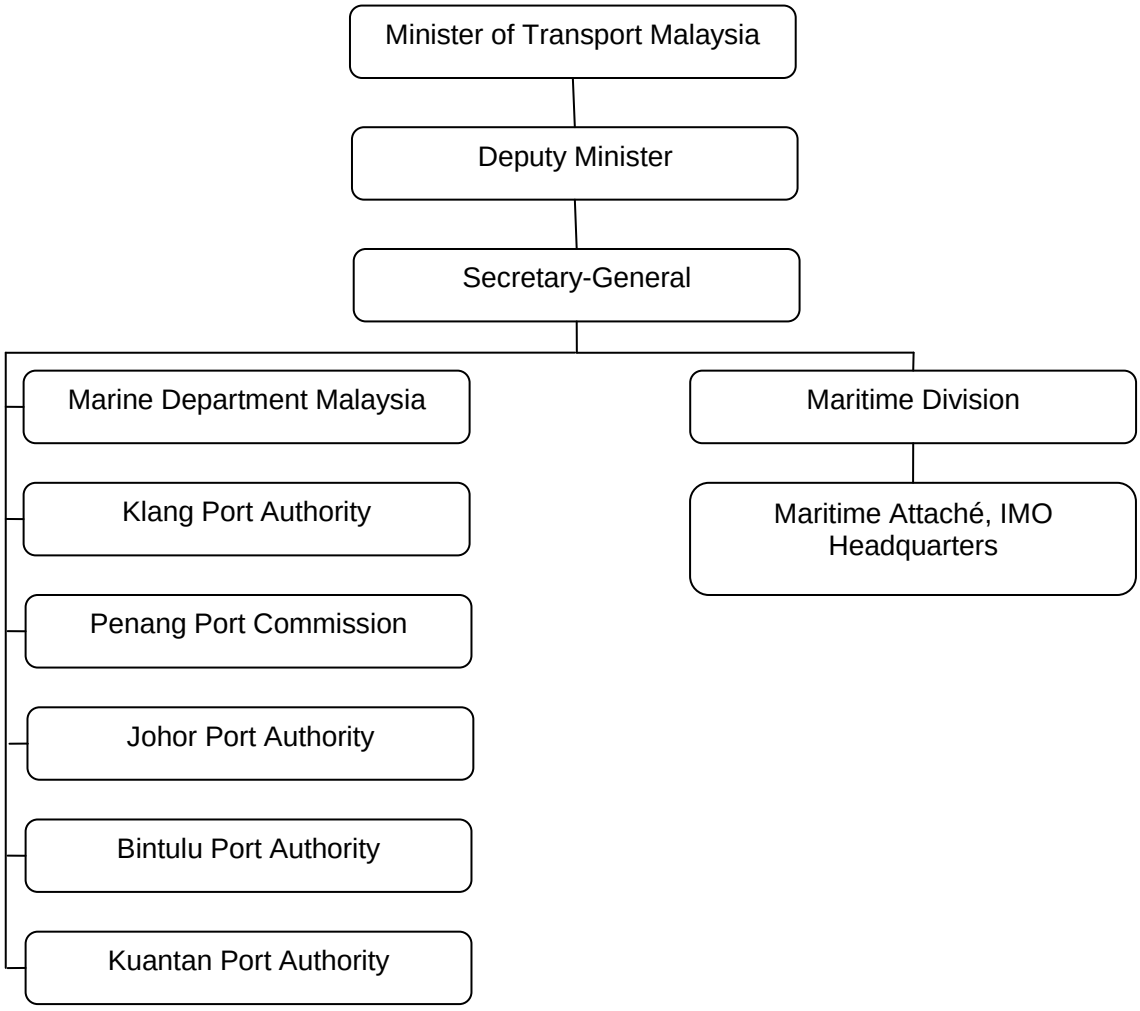
7.3 **The institutional framework for the ISPS Code**

One of the international measures that Malaysia uses to enhance port security is the adoption and implementation of the ISPS Code. It is therefore necessary to have an understanding of the institutional arrangements introduced in connection with this.

Decisions pertaining to most of the international maritime conventions such as SOLAS were entrusted to the MOT in the ratification process. The core responsibility of the MOT involves planning, formulating and implementing policies related to the national maritime industry including the port sector. The principal policy areas are maritime safety and security, shipping and protection of the marine environment (Malaysia Maritime Dossier, 2010: 3).

Since merchant marine issues fall under the MOT, the Marine Department that functions under the aegis of the MOT has been assigned as an implementing agency for policies formulated at ministerial level. Its core duties include regulating the safety of ships and navigation, maritime transport security, training and certification of seafarers and preventing pollution from ships. The department has the primary objective of enhancing the national maritime sector by establishing a system for safe and secure sea lanes of communication and marine conservancy. As such, the department requires implementing and enforcing all the IMO instruments that are ratified, including all relevant national laws (Malaysia Maritime Dossier, 2010: 13). In addition to this, the five Federal port authorities, namely Klang Port Authority, Penang Port Commission, Johor Port Authority, Bintulu Port Authority and Kuantan Port Authority have been assigned responsibility for the regulatory function of their respective ports. Figure 7.1 shows the organizational structure of the MOT.

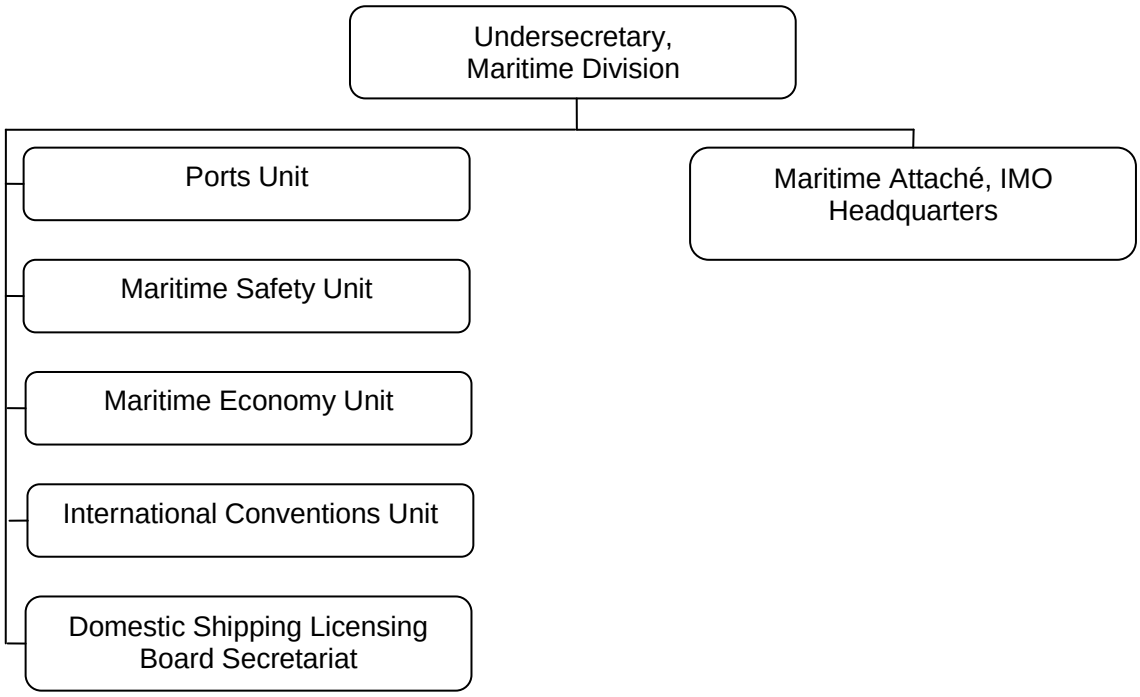
Figure 7.1: Organisational Chart of the Ministry of Transport



Source : Malaysia Maritime Dossier, 2010: 4

Within the Maritime Division of the MOT, there are several sub-units responsible for various marine matters. Figure 7.2 provides a general overview of the segmentation of the Maritime Division.

Figure 7.2: Organisational Chart of the Maritime Division, Ministry of Transport



Source: Malaysia Maritime Dossier, 2010: 5

In view of sensitive nature of security, there appears to be some complexities in the way security policies are delegated in the Maritime Division of the MOT. Although port security is regarded as imperative for all Federal ports particularly, within the organisational arrangement, the MOT did not create a specific unit for security primarily because the Ports Unit in the Maritime Division is given responsibility for all policy issues pertaining to Federal ports. The Unit then delegates the related policy decisions made at the Ministry level to all Federal port authorities for implementation. However, since the Marine Department holds the responsibility as the DA for the ISPS Code implementation (as explained below), the Ports Unit has to liaise with the Marine Department to carry out the required security policies effectively. This means that the Ports Unit has a limited role or no direct control of port security measures at the Federal ports. The lack of co-ordination with the individual port authorities creates difficulties for the Ports Units in monitoring the outcome of the security measures in a close manner. In addition to this, at the national level, the government established the NCS under the Prime Minister's Department to manage all the security issues in a wider spectrum. This type of segmented arrangement however seemed have some implications which will be deliberated in the following chapter (Chapter Eight).

In relation to implementation of the ISPS Code, the MOT has responsibility for policy matters while the Marine Department is the enforcing agency. As the Code involves a security issue, the NSC is also connected. At the institutional level there were some difficulties in deciding which agency to lead the ISPS implementation. According to Ja'afar (2007: 200) the initial idea to assign the Marine Department as the DA was objected to strongly by the RMP. The RMP argued that it would be inappropriate for the DA to share classified security intelligence information with other agencies in order to fulfil the requirement of the ISPS Code. As the ISPS Code stipulates that it is the duty of the Contracting Governments to set three different levels of security at any particular time which requires intelligence sharing among the related agencies, such a condition did not fit well with the RMP. In Malaysia, the security intelligence role is usually performed exclusively by the Special Branch Department under the RMP. With such strong objections from the police force, even given the existing functions of the Marine Department, conflict still arose at the outset as to who should be appointed as the DA in accordance with the Code's requirement. One respondent involved in the ISPS process in the Marine Department asserted:

> The main issue was who is going to become the DA …When we said that we are willing to become the DA, there were lot of questions coming out that we are not a uniformed agency how can we become the DA…. Agencies start questioning who are we to become the DA because we are not a uniformed body. We have to start explaining to them that this is nothing to do with guns or firearms (Interview Code: 06).

Since the ISPS Code does not pertain to the use of arms, such as by armed forces, and neither imposes any condition that it should be implemented by uniformed services, the government, through NSC which chaired the ISPS Security Committee, eventually decided that Marine Department was the appropriate agency recognising that its core functions are closely related to the ISPS requirements.

The specific responsibility of the DA was subsequently stipulated in Part V, Section 249D of Merchant Shipping (Amendment and Extension) Act 2007 where the Code was transposed into national legislation by amending the Merchant Shipping Ordinance 1952. The Act was endorsed by the Parliament and came in force as Act A1316 on 24 December 2008 (Act A1316, 2008). The DA duties are to approve the ship security assessment and plan and the maritime transport security area assessment

and plan; to verify the compliance of maritime transport security areas; to exercise control and compliance with security measures to be adopted at the different declared security level; to notify the company, ship's master or operator of a designated marine facility the security level declared for the ship; to declare any area or part of an area in Malaysian waters as a maritime transport security area.

It is worth noting that the NSC holds the lead responsibility for coordinating the response to various types of natural disaster such as floods at national level. It has the authority to mobilize different security forces including the Royal Malaysian Navy, MMEA, RMP and numerous other government agencies when the situation warrants greater attention and resources (Osnin, 2009: 338). For the ISPS Code national security requirement, the NSC holds the chairmanship of the National Level Security Committee by determining the security level in consultation with its committee members. Members of this committee include representatives of the MOT, Ministry of Foreign Affairs, Marine Department, Armed Forces, MMEA, RMP, Research Department of the Prime Minister's Department, Intelligence Department, Customs, Chief Government Security Office of the Prime Minister's Department, Marine Police, Immigration, Fire and Rescue Department and Department of Environment.

7.4 **The difference between the ISPS Code (Act A1316) and Act 298**

Following implementation of the ISPS Code, Port Klang was subjected to an additional auditing process as mandated by this. It means that each year the port undergoes two types of auditing process, one for domestic and the other for international purposes (Interview Code: 09).

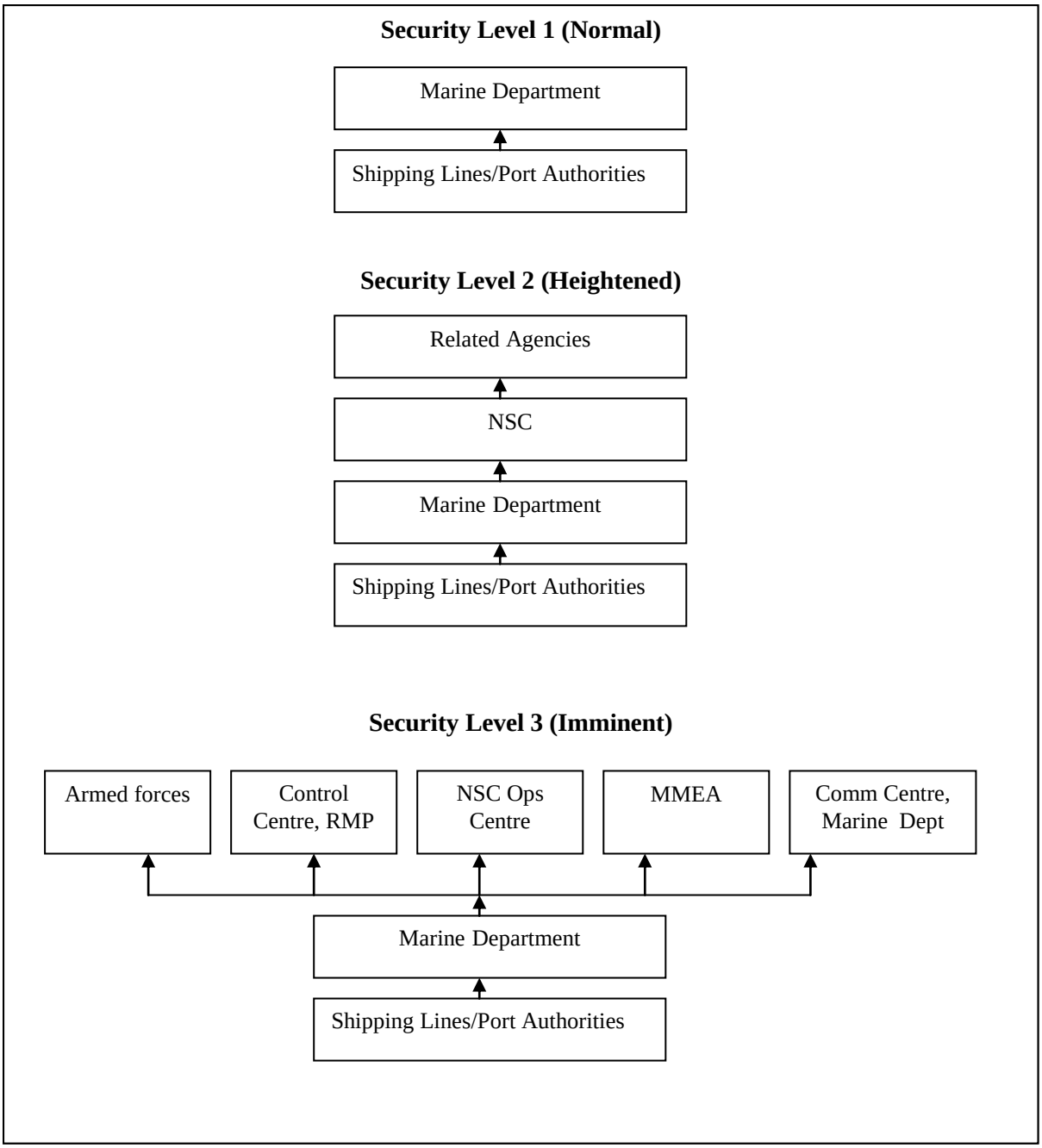
According to a respondent involved in implementation of the ISPS Code, since Port Klang was already observing a strict port security measure through the Protected Areas and Protected Places Act 1959 (Act 298), when the ISPS came into force, the port found it rather easy to comply:

> They [Federal ports] actually had all the procedures like access control all that. The only thing is that they did not document it in accordance with the ISPS programme. So when this ISPS came, we told the major ports and when they look at it they said they have no problem for them. They said we can comply. The only thing is to re-document it into our system as according to ISPS Code because for them there is no security level before the ISPS Code…but when the security level [is] heightened to level two and

> three then they have to do additional enforcement. So for those ports, security is just added few extra continuum. The fencing all that is already in place before that. So [for a] major port is not a problem (interview Code: 06).

Even so, despite the fact that the port implemented the ISPS Code without much problem, when the security level is heightened from Level One to Level Two and Three, additional external support is needed particularly at Level Three. The Federal government through the NSC is involved directly, deploying various enforcement agencies to mitigate the impending risk. Figure 7.3 illustrates the three levels of security arrangement under the ISPS Code in the Malaysian context. At Level One where the security is in normal condition, the Marine Department as the DA takes charge of the security and requires the shipping lines and port authorities to report directly to them if there is any threatening incident in the port. When there is a heightened risk of a security incident, the security level will be increased to Level Two. During this situation, the Marine Department will report directly to NCS and NCS then relay to other key security organisations such the Police, MMEA and Armed Forces the need to be alert and control the situation. However, when the situation has lasted for a period and it is considered that there is a probable or imminent risk of a security incident, the NSC will increase the security level to Level Three. It then tasks all the key agencies and coordinates simultaneously to take the appropriate actions to contain the situation.

Figure 7.3: Security Levels of the ISPS Code implementation in Malaysia



Source: Peraturan Tetap Operasi Majlis Keselamatan Negara (Standard Operating Procedure of the National Security Council), ISPS Code, (n.d.): 26-28

As already made clear, all Federal ports in Malaysia including Port Klang had established advanced security infrastructures and manpower resources prior to 9/11 as mandated by the domestic law. This has consequently eased the expenses burden when the ISPS Code came into force. As one senior respondent responsible for the ISPS Code implementation commented:

> Even before this, the security already existed. We only updated according the ISPS requirement. Each port here has already taken measures at their respective port. There is redundancy between the requirements of National Security Council under the Protected Area Act because they take action according to their own act. Their requirement is to protect the things from any trespassing and illegal entry or smuggling. But under the ISPS we not only protect but also need to get intelligence information. That's made a little difference. In terms of structure, is almost the same (Interview Code: 08)

Table 7.4 briefly illustrates the main difference in port security measures between the Act 298 and the ISPS Code.

Table 7.4: The Difference Between Act 298 and the ISPS Code

Act 298	ISPS Code – Act A1316
Any area that appears to be necessary or expedient that special measures should be taken to control the movement and conduct of persons, the Minster may declare the area to be protected area.	The Designated Authority (DA) – who is the Marine Department declares or ceases any area or part of an area in Malaysia and Malaysian waters as a maritime transport security area.
Adhere to the guidelines as required by CGSO.	Adhere to the guidelines as required by DA.
Maritime facilities covered on land site only.	Maritime facilities covered both land and port waters.
There is no security level 1,2 and 3.	There is security level 1,2 and 3.
There is no drill.	There is drill and exercise.
Protect port from trespassing, illegal entry, smuggling.	Protect port from trespassing, illegal entry, smuggling and need to get intelligence information.

Source: Compiled from Interview Code: 08, 09, 06 and 23

Despite there are some differences between these two instruments as one initiated based on national jurisdiction and the other is mandated by the IMO for international requirement, Malaysia's proactive measure indicates that considerable thought and attention have been given to safeguard the port from any form of security threats. This advance arrangement much earlier than the ISPS Code provided a solid platform to carry out the international practice without much resistance or difficulties.

7.5 Implementation of the ISPS Code

Technically, amendments to Merchant Shipping Ordinance 1952 for incorporating the ISPS Code were carried out in a pragmatic way. According to the respondent directly

responsible for the implementation, the Malaysian government literally adopted the whole ISPS Code and legislated as Act A1316. Nonetheless additional clauses such as penalties and port authority responsibility were included with the international requirements to further strengthen the practicality of the Code in line with the national environment. This makes the practical application of the ISPS Code in Malaysia more robust than the standard international requirements or practices. Such expansion has to be viewed in the total context of Malaysia's serious commitment in matters relating to security. The government is very particular about any issue that touches on national security, trading and foreign policy. The main reason for the ISPS extension is explained further below.

The Code was introduced as an international framework for the SOLAS 1974 contracting parties to be adopted in national context by affirming that "it is recognized that the extent to which the guidance applies may vary depending on the nature of the port facility and of the ship, its trade and/or cargo" (ISPS Code, 2003: 5). However, the Code limited the definition of port facilities solely to the ship/port interface only (ISPS Code, 2003: 4). In the Malaysian context, the government widened its scope by expanding application beyond the port and ship interface. This is mainly for the reason that on the land side, the whole port facilities are regulated under the Act 298 for essential services which provided a good ground for a smooth implementation of the Code. But at sea, ships calling at Northport, Westport and Star Cruise Terminal are required to share one common anchorage point as a waiting area before berthing alongside. This area is referred to as the Maritime Transport Security Area. To suit security needs under the ISPS mandate, Act A1316 grants the responsibility to the port authority to take charge of such an area beyond the immediate port/ship interface. As such, port security covers port facility as well as port area.

While the terminal operators take charge of their own facility security at the land site and a range of 50 to 100 meters towards the waterside as a restricted area, beyond this point up to the anchorage is the responsibility of the port authority. One respondent who is very knowledgeable in the ISPS matters explained:

> In Malaysia, it is unique where they share the anchorage point and none of them is actually want to take the responsibility to take care of this area. Because the anchorage area is a common area, that is why the Port Klang Authority comes into picture, where the Port Klang Authority will act as a

> Port Area Security Officer which is responsible for the anchorage point approaches. Since they [PKA] are the authority they also take part in ensuring the whole security under their purview. That is why it is unique in Malaysia because we share the areas...because users share the anchorage point, nobody has actually taken the responsibility. That is why the Port Klang Authority comes into the picture and we have port area. That part of the world [different countries], I don't think they have port area like this…Port Area Security Officer (PASO), now refers as Maritime Transport Security Officer (MTSO) (Interview Code: 09).

In Malaysia, the word 'port facility' as proposed by the Code has been changed to 'marine facility' incorporating the area beyond the port and the ship interface as prescribed by Section 249A, Act A1316;

> *(a) an area of land, water or other supporting surface used, designed, prepared, equipped or set apart for use, either in whole or in part, for the arrival, departure, movement or servicing of vessels;*
>
> *(b) a building or installation and equipment in the area associated with it or used or set apart for handling or storing goods that have been or are destined to be transported on a vessel;*
>
> *(c) equipment and facilities used to provide services relating to marine transportation;*
>
> *(d) a fixed and floating structure, including an offshore industry structure;*
>
> *(e) an off-shore industry mobile unit.*

Correspondingly the port authority employee referred to as the Port Area Security Officer (PASO) before the Act A1316 came into force became the Maritime Transport Security Officer (MTSO) and the port operator employee is the Maritime Facility Security Officer (MFSO) rather than the Port Facility Security Officer (PFSO). Under this act, the authority is given a heavy responsibility which has not been spelled out anywhere in the Code for international practice. But in Malaysia's case:

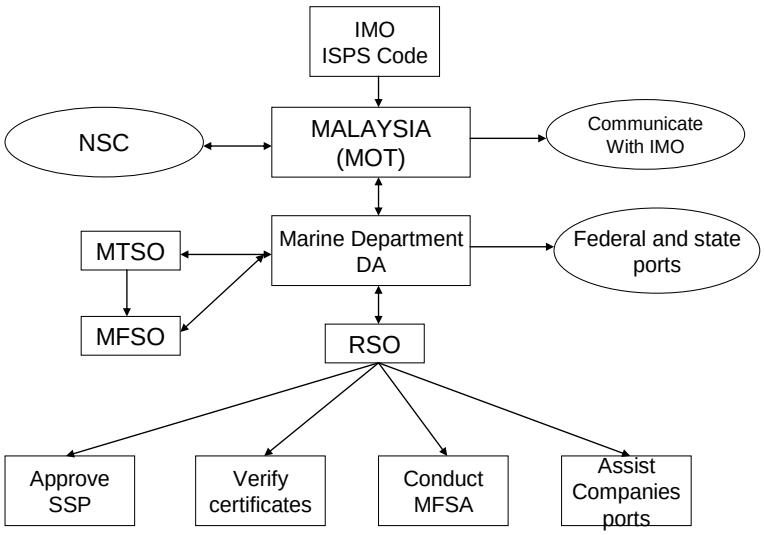
> Everything is authority that is MTSO. In the Code, there is no mention of authority. It's more to DA direct to facility. But in Malaysia we have authority. 90% of our Act refers to the role of authority. The other 10% of it discusses about the implementation. The authority is the Port Authority (Interview Code: 08).

While the Act A1316 requires the MFSO prepares the Marine Facility Security Plan (MFSP) for the area covered by the terminal operators, The Act mandates the MTSO to draw up a Maritime Transport Security Area Security Plan (MTSASP). This plan covers a much bigger area and going beyond the marine facility by taking into account waterways, anchorage areas, and marine service providers such as pilot boats, bunker boats, tugboats, water barges and mooring boats which is not addressed by the MFSO in preparing the MFSP.

In the case of those ports which are not under the purview of any port authority, the responsibility is given to the Marine Department to undertake the task of the MTSO. In 2011 all together there were 20 MTSO and 90 MFSO throughout Malaysia as shown in Appendix VI (interview Code: 09).)

Figure 7.4 illustrates Malaysia's ISPS Code implementation structure.

Figure 7.4: The ISPS Code Implementation Structure in Malaysia



Source: Modified from Osnin, 2009: 339

As explained earlier, since Malaysia is a party to the SOLAS 1974 Convention, the country is obligated to implement the ISPS Code as mandated by the IMO. In this regard the NSC takes charge as the Chairman of Security Committee and shares the

policy direction with the MOT. The MOT then implements the policy through the Marine Department which operates under its purview. As an appointed DA, the Marine Department takes the full responsibility for monitoring and enforcing the Code in all the Federal as well as the state ports. In this circumstance, both the MTSO and the MFSO are required to abide by all instructions given by the DA. They are also subjected to the DA's initial audit of the security assessment and plan before getting the Statement of Compliance (SOC) to certify that the port facility is ISPS compliant. The SOC is valid for five years. Before its expiry, the DA will carry out unscheduled audits either in the second, the third or the fourth year and a renewal audit in the final year. While the DA carries out the auditing process for both the MTSO and MFSO, the MTSO will conduct its own internal audit with the MFSO as the terminal is answerable to the port authority directly. Since the Code mandated ships too required a security certificate called the International Ship Security Certificate (ISSC) to certify as the ISPS compliant, the Marine Department has appointed seven private shipping companies as the RSO for this purpose. They are; American Bureau Shipping (ABS), Det Norske Veritas (DNV), Germanischer Lloyds (GL), Lloyds Register (LR), Nippon Kaiji Kyokai (NKK), Bereau Veritas (BV), Ship Classification of Malaysia (SCM) (interview Code: 09).

The appointed RSOs take charge of issuing the ISSC certificate for ships through various auditing and verification process. The Marine Department maintains a close relationship with these RSOs and did not relinquish its full responsibility to them, instead it established some form of monitoring. It was explained, however, by an official of the Marine Department that "the Marine Department has established cooperation with each of these RSOs and at any time we can follow with them for auditing. But rarely do we involve because of time constraint. The Marine Department will not do the audit but just be an observer" (Interview Code: 09).

When the ISPS Code was implemented, the Malaysian government went further by not confining its application to passenger ships, including high-speed passenger craft, ships above 500 gross tonnage and port facilities serving such ships engaged on international voyages but also included floating storage offloading (FSO) and floating production storage offloading (FPSO). These are 'stagnant' ships that provide storage facilities for oil rigged under the sea. As one respondent in charge of the ISPS

enforcement in the Marine Department mentioned, "about this facilities, in other countries I don't think they certify the FSO. FSO is not actually mobile drilling unit. They are actually floating objects. In Malaysia we have eleven FPSO and FSO" (interview Code: 09).

Another interesting aspect of the ISPS practice in Malaysia is that the Act A1316 imposes punishments for non-compliance, whereas the Code proper did not mention anywhere any form of penalties. A senior official from the Marine Department who has a good knowledge of the ISPS Code explained, "in the Code there is no imposition of fine or penalty. But in the act there is penalty. If you fail to comply then they have to pay the penalty. The fine ranges from RM25,000 [USD8,065] to RM50,000 [USD16,130]. Jail is for three to five three years. It's all based on the act. The act has to read together with the Code" (Interview Code: 08). This was a reference to Section 249M of the Act.

Further, Section 249R of the Act states;

> *(1) The company, master of a ship, Maritime Transport Security Officer or operator of a designated marine facility shall report immediately to the Designated Authority upon the occurrence of the following security incidents:*
>
> *(a) an explosion that is not the result of an accident;*
> *(b) a bomb threat, armed attack, hostage taking, stowaway or hijacking; or*
> *(c) any breach of security.*
>
> *(2) Any company, master of a ship, Maritime Transport Security Officer or operator of a designated marine facility who fails to report the security incident shall be liable for each offence to a fine not exceeding fifty thousand ringgit or to imprisonment for a term not exceeding five years or to both.*

Despite the fact that maritime terrorism is not considered a serious threat in Malaysia, the extension of security beyond ship/port interface and imposition of heavy penalties, neither of which are required by the Code, may be intended to demonstrate the Malaysian government's serious commitment to realising the international regime in a local context. There are three reasons to explain this. Firstly, it is due to the historical background. Before attaining independence, Malaysia encountered numerous types of threats originated from communist insurgency and other forms of

land-based terrorism as explained earlier. Such pressures prompted harsh legislative measures to maintain law and order. This precedent was reflected in the implementation of the ISPS Code at the national level with the notion of creating fear in potential wrong doers. Secondly, Malaysia was attempting to demonstrate to the international community especially to the US its strict port security measures. This was particularly expected from its major trading partners by the US and reflected Malaysia's position as the nineteenth largest trading partner of the US (See Table 7.5 below). Thirdly, the spirit of sovereignty holds strongly among the ASEAN member states encouraging Malaysia to demonstrate its determination to defend its security from any form of infringements. The issue of sovereignty and its significance for Malaysia's maritime security is considered further in Para 7.9 below.

7.6 **Port Klang Authority - MTSO**

As the legally appointed MTSO, the PKA has responsibility for four facilities under its portfolio - Northport, Westport, Jetty Sultah Salahuddin Abdul Aziz Power Station and Star Cruise Terminal.[32] In addition, the area of jurisdiction extends to Port of Tanjung Bruas, Malacca by virtue of the PKA's (Extension of Function to Port of Malacca) Order 1986 (Interview Code: 16 and 17).

In meeting the legal duties of the MTSO, PKA has been assigned the chairmanship of Port Klang Maritime Transport Security Area Security Committee (PKMTSASC). The committee was established in line with the provision section 249G (3) Act 1316 which says;

> *(1) The Designated Authority may appoint a Maritime Transport Security Officer in respect of a maritime transport security area.*
>
> *(2) The Maritime Transport Security Officer shall be responsible for the development, implementation, revision and maintenance of the maritime transport security area security assessment and maritime transport security area security plan.*
>
> *(3) The Maritime Transport Security Officer may establish a committee to monitor and coordinate security matters within the maritime transport security area.*

[32] Jetty Sultan Salahuddin Abdul Aziz Power Station or simply known as Kapar Power Station is a facility that provides importation of coal and oil for the utility industry, Tenaga Nasional Berhad which located in the North Klang Straits. Star Cruise Terminal is a dedicated cruise terminal providing berthing services for passenger cruises.

The main objective of this committee is to build awareness of potential threats to Maritime Transport Security Areas, identify those threats, improve security procedures, promote coordinating and reduce any vulnerability. The committee must convene a meeting at least once a year or as and when required. (Interview Code: 17).[33]

Act A1316 Section 249G stipulates that:

> *(2) The Maritime Transport Security Officer shall be responsible for the development, implementation, revision and maintenance of the maritime transport security area security assessment and maritime transport security area security plan.*
>
> *(3) The Maritime Transport Security Officer may establish a committee to monitor and coordinate security matters within the maritime transport security area.*

While they are accountable for Port Klang's area, the responsibility of the MFSO under Section 249H (3) of Act A1316 is:

> *The Marine Facility Security Officer shall be responsible for the development, implementation, revision and maintenance of the marine facility security assessment and marine facility security plan, and for liaison with the Ship Security Officers and Company Security Officers.*

The area covered by the MTSO includes all buildings, stretches of roads, installations, jetties and internal and external wave-breaker facilities within the perimeter fences of

[33] Member of the PKMTSASC comprises of representatives from the government and private agencies. They are:
(i) Northport
(ii) Westport
(iii) Port Klang Cruise Centre
(iv) Kapar Energy Ventures
(v) SPPG (M) Sdn Bhd
(vi) CGSO – State of Selangor
(v) Marine Department – Central Region
(vi) Royal Police – Special Branch Deparment
(vii) Royal Police – Marine Deparment
(viii) Royal Customs
(ix) Immigration Department
(x) MMEA
(xi) Health Department
(xii) Shipping Agents (Interview Code: 17)

the MFSO's security area stretching 50 to 100 meters towards the sea within an area of 2,045 acres in the District of Klang (Interview Code: 17).

Since the MTSO is responsible for facilities and area beyond terminal's responsibility, the DA will issue a separate SOC to PKA in addition to MFSO as mentioned earlier. This requires the PKA to prepare its own security assessment and plan in order to get SOC. On this, a DA official commented:

> If the authority fails to comply then they have to pay the penalty. So the DA issues two SOC's one for the authority and one for facility. If anything happens to the facility and they failed to report, both the facility and authority will be compounded. That is why the authority has to know each facility under their control. That is why under our act the authority is known as Port Area Security Officer [later changed to MTSO] and it is mentioned in our Act 1316. But this is not stipulated in the ISPS Code (Interview Code: 08).

The choice of the actual MTSO is in the hands of the DA which appoints a named individual. However this created some anxiety in the appointee in view of harsh penalties for breaching their responsibility, going beyond the ISPS Code proper. As a consequence, a senior security official of the PKA stated:

> I was appointed personally as the MTSO. This scares me. If there is any non compliance or breach of any provision, I will be penalised or summoned. The penalty is RM50,000 [USD16,130]. This charge is for failing to adhere to the Act. Because this is a national Act, the appointment is done by name, a personal appointment. It is done by the Marine Department. They appointed me as the MTSO not PKA as the MTSO (Interview Code: 17).

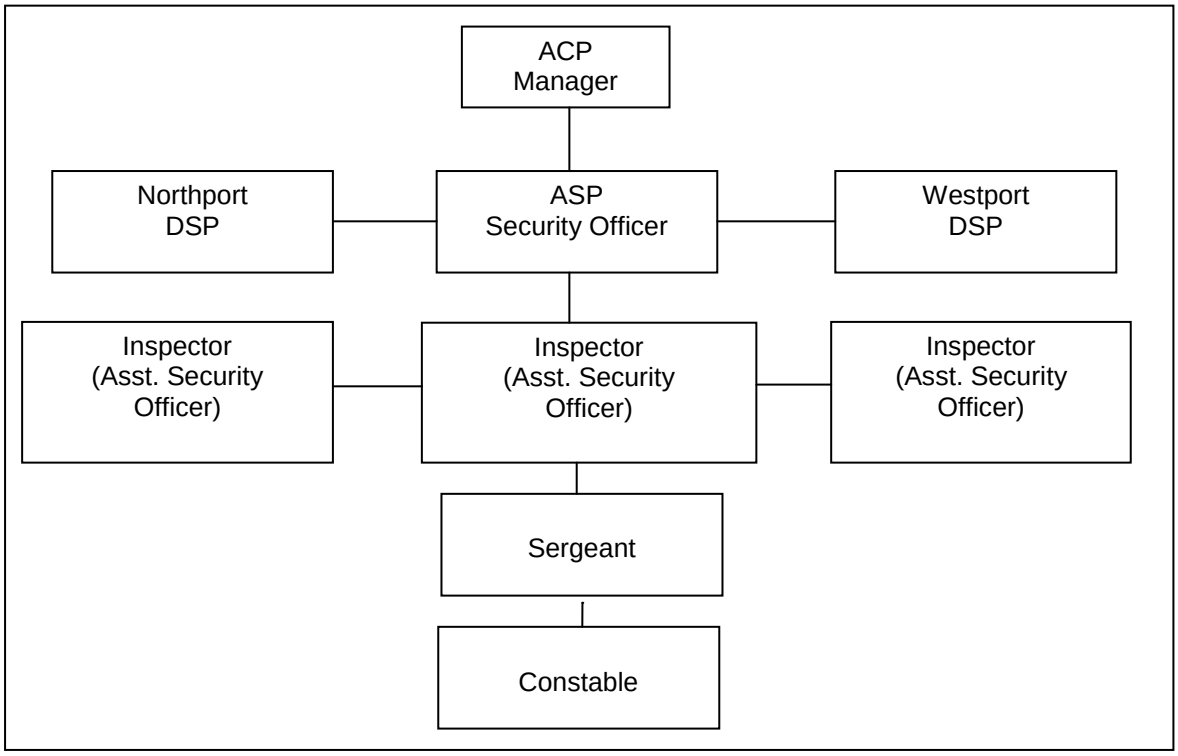
Looking at a critical stand point however, this type of fear imposes more pressure and alertness to those holding the key responsibilities in security matters. Further, such a move is expected to avoid them for having a lackadaisical attitude in order to maintain the required security standard since the Malaysian government intends to demonstrate a good security practice as noted above.

Apart from securing the port facilities, the MTSO is also responsible in monitoring the arrival of ships in Port Klang for security reason. The Act A1316 under Section 249O (1) requires that "every master of a ship shall report to the Maritime Transport Security Officer before entering any designated marine facility within a maritime transport security area in accordance with the prescribed procedures", For this

purpose, the PKA Security Department issued a Pre-Arrival Notification (PAN) using the NPM38/2010 form. Under this arrangement, the PKA must receive the PAN not less than 48 hours prior to arrival of all ships (except for ships on 'short call') from the shipping agent or master via email or fax before the ship is allowed to enter the port (Annual Report of Port Klang Authority, 2010, 55).

Despite the PKA retaining its regulatory function and continuing to be responsible for port security in Port Klang after the privatisation, inadequate staffing in Security Unit was one of a critical factor that created some concern for effective security enforcement. As stated in the monthly bulletin of PKA (Gateway, 2011: 16), the PKA operates with a capacity of 60 to 70 staff. The Regulatory Division comprises of five departments; the Marine Operations, Security, Fire, Dangerous Goods and Free Zone and it is given the responsibility for overseeing and regulating all shipping and maritime activities within the port limit (Gateway, 2011: 16). Figure 7.5 provides the organisational chart of Security Department (Auxiliary Police) of the PKA since 2009 to present (2011). As compared to Figure 6.1 with minimal workforce as seen in the previous chapter, there was a little expansion in the department since 2009 in view of the ISPS need. A drawback of such arrangement is that the personnel of Security Department are also responsible for the Fire Services. Within this combination, the head of the Security Department; Assistant Commissioner of Police (ACP) is appointed as the MTSO.

Figure 7.5: Organisational Chart of the Security Department, Port Klang Authority (2009 – 2011)



Source: Compiled from Interview Code: 17

7.7 Port Klang – Securing the supply chain

The following section discusses other security measures going beyond the ISPS Code.

7.7.1 Container Security Initiative (CSI)

It has previously been argued that ports do not function as stand alone entities but as components in supply chain management. While the ISPS Code may be regarded as the epitome of international port security measure, the US-led measures such as the CSI, CTPAT and Megaport are national measures having a global effect. The US considered some of its measures, especially the CSI, as indispensable for the global trade chain, given the strategy to secure its border from any potential terrorist threat using containers (Container Security Initiative, 2006: 6). Furthermore, given the fact that security standards vary greatly from country to country, it is much easier to place any illicit or dangerous material into a container and have it shipped to other destinations. Since the container is usually transferred several times in the course of its journey, there is a possibility for any perpetrators to tamper with one unit, mixed

up amid thousands of other similar containers. Therefore locating and intercepting the one with the dangerous content is not a simple matter (Szyliowicz, 2004: 355).

As explained in Chapter Four, the CSI was introduced in January 2002 with the initial goal to establish this in the twenty largest container seaports of the world with the largest volume of exports to the US (US Customs Border and Protection, 2011). Considering Malaysia is one of the major trading nations of the US, the Malaysian government has made every effort to be part of the programme and Port Klang and PTP have been identified for this purpose.

Malaysia's interest to participate this programme should be viewed in a broader context by looking at its relationship with the US in terms of foreign policy. Generally, the central tenet of Malaysia's foreign policy is to uphold the principles of "sovereignty and mutual respect for territorial integrity, mutual non-aggression, and non-interference in domestic affairs of other countries" (Australian Government, Department of Foreign Affairs and Trade, 2012). In addition, the government also maintains "equidistant foreign policy that enables the government to exercise 'flexibility' in safeguarding the national interest" (Nesadurai, 2004: 25) by adapting to the existing world order (Khalid, K.M., 2011: 433). Such principles have encouraged Malaysia to maintain a good bilateral relationship with the US in a range of endeavours including trade, defence and security and combating transnational crimes since the 1970s (Nesadurai, 2004: 25). Although the bilateral relationship in general is positive, it is murky during the Mahathir Administration characterised as a 'combination of criticism and cooperation' (Nesadurai, 2004: 1), however "much clarity was restored not only by Abdullah but also Najib, who continues to build stronger ties with the Obama administration" (Khalid, K.M., 2011: 449).[34] In essence, while sustaining this amicable relationship, Malaysia holds the policy of 'rejecting dominance, embracing engagement' with the US (Nesadurai, 2004: 24).

[34] Malaysia has been administered by six Prime Ministers since independence in 1957. Following is the order:
(a) Tunku Abdul Rahma (1957 – 1970)
(b) Tun Abdul Razak (1970 – 1976)
(c) Tun Hussein Onn (1975 – 1981)
(d) Tun Mahathir Mohammad (1981 – 2003)
(e) Tun Abdullah Badawi (2003 – 2009)
(f) Dato' Sri Mohd Najib Tun Abdul Razak (2009 – present - 2011)

In relation to the area of trade, there is a reasonable trade flow between these countries in which it greatly supports Malaysia's economic progress. For example, as of 2010, Malaysia was the nineteenth largest trading partner of the US as illustrated in Table 7.5.

Table 7.5: Top US Trading Partners by Total Merchandise Trade in 2010 (in Million US Dollars)

Rank	Country	Total Trade	% Share	US Exports	US Imports	US Balance
0	World	3,189,595	100.00	1,277,504	1,912,092	-634,588
1	Canada	524,672	16.45	248,194	276,478	-28,284
2	China	456,822	14.32	91,878	364,944	-273,066
3	Mexico	392,975	12.32	163,320	229,655	-66,334
4	Japan	180,893	5.67	60,545	120,348	-59,802
5	Germany	130,881	4.10	48,201	82,680	-34,478
6	UK	98,252	3.08	48,497	49,755	-1,259
7	South Korea	87,703	2.75	38,844	48,860	-10,016
8	France	65,561	2.06	27,010	38,551	-11,541
9	Taiwan	61,934	1.94	26,027	35,907	-9,880
10	Brazil	59,275	1.86	35,357	23,918	11,439
11	Netherlands	54,031	1.69	34,998	19,033	15,965
12	India	48,754	1.53	19,223	29,531	-10,308
13	Singapore	46,628	1.46	29,150	17,478	11,671
14	Venezuela	43,436	1.36	10,661	32,775	-22,114
15	Saudi Arabia	43,011	1.35	11,591	31,420	-19,829
16	Italy	42,655	1.34	14,191	28,463	-14,272
17	Ireland	41,170	1.29	7,272	33,898	-26,626
18	Belgium	41,141	1.29	25,551	15,590	9,962
19	**Malaysia**	39,887	1.25	13,982	25,905	-11,923
20	Switzerland	39,821	1.25	20,692	19,129	1,563

Source: Nanto and Donnelly, 2011: 24

For Malaysia, the US is the fourth biggest trading partner (The Star Online, 19 May 2011).[35] As such Malaysia is considered a key trading partner of the US. Trade flows between Malaysia and US are shown in Table 7.6.

[35] Malaysia's key trading partners in international merchandise trade (Export and Import destinations) as of 2011 is shown in Appendix VII.

Table 7.6: Malaysia-US Trade Flows (2001-2011)
(in billion US Dollars)

Year	Exports	% of Total Export	Imports	% of Total Import
2001	17.8	20.2	11.8	16.0
2002	18.8	20.2	13.1	16.4
2003	17.8	17.8	12.2	15.2
2004	23.6	18.7	15.2	14.5
2005	33.9	19.7	18.3	12.9
2006	35.7	18.8	19.4	12.5
2007	30.3	15.5	17.6	10.8
2008	27.6	12.5	18.7	10.8
2009	19.5	10.9	15.7	11.2
2010	19.6	9.5	18.3	10.7
2011	18.5	8.3	17.8	9.6

Source: Complied from MITI , 2012 and Martin, 2008: 24
Note: MITI's figures in Ringgit Malaysia (RM) were converted into USD

In addition to trade, the US also forged an informal tie with Malaysia in respect of commercial access to Malaysian ports and repair facilities. The US companies were involved in logistic services as well as ship repairs and maintenance by joint venturing with the local players (Martin, 2008: 3).

Apart from the trade significance as stated above, because of the cordial relationship, 9/11 is regarded as a crucial turning point in Malaysia-US relations in which the Malaysian government not only condemned the attacks but also hastened its measures by arresting the suspected Islamic militants especially the JI members for national and regional security purpose (Nesadurai, 2004: 15-16). At the same time, Malaysia also assisted the US in arresting and handing over the suspected terrorists wanted by the US (Wah, n.d. 7). This indicates that the Malaysian government provided a full support to the US in fighting against terrorism and also cooperated extremely closely with the US on anti-terrorism activities (Nesadurai, 2004: 20). It appears that the post 9/11 era brings these two countries even closer for security cooperation. In view of this, the US and Malaysia signed a joint declaration to fight terrorism in SEA on May 2002. The declaration established a mutual cooperation in counter-terrorism in defence, banking, intelligence sharing, border control, transportation and law enforcement. Hence the existing defence cooperation has not only been enhanced but provided another avenue in the form of non-military and anti-terrorism related cooperation (Wah, n.d. 6). This includes safeguarding the merchandise trade from

any security threats through the CSI initiative in which Malaysia agreed to participate as required by the US. As already noted, the whole scenario reflects the power-play between the US and Malaysia in view of their national interests. For Malaysia, as a fast developing nation, there is the need for the US support for its socio-economic development. Therefore attempts were made to please the US by complying with the anti-terrorism measures through an amicable relationship. On the other hand, the US needs Malaysia's support not only for commercial reasons but also, as there were many Islamic militant groups operating clandestinely, to maintain a close eye on terrorism activities within the ASEAN region.

On this account, the government signed the Declaration of Principle to join in the CSI programme and implemented it in the local context. Malaysia was represented by the Director General of Customs and for the US was Commissioner Robert Bonner. The agreement was singed on 20 January 2003. On that day, the Commissioner stated:

> We recognize the high volume of trade between the Ports of Klang and Tanjung Pelepas and seaports in the U.S and Malaysia's role as an intermodal transport hub for cargo originating in many countries. This is an important step not only for the protection of trade between the U.S and the government of Malaysia, but for the protection of the most critical component of the world trading system as a whole - containerized cargo (United States Customs Border and Protection, 2011).

A reciprocal programme enforced on a bilateral basis. The Port Klang signed the agreement on 8 March 2004 and the PTP on 18 August 2004 (Royal Malaysian Customs, 2010).

The CSI is conducted by posting the US officials at the selected major foreign ports and requiring the advance transmission of manifest documentation to the US Customs by pre-screening containers bound for the US before they are loaded onto the ship. In Port Klang's case, the scanning machine required for pre-screening purpose had already been installed by the Royal Malaysian Customs (RMC) in both Northport and Westport for their own use prior to the CSI implementation. There were two in Northport and Westport respectively and one mobile machine. However, information obtained during the field trip indicates that there were no additional machines installed as the US preferred to utilise the existing machines in Port Klang.

The initiative provides for a reciprocal process where the host country allows the stationing of their officers in the US. Malaysia, however, did not do so. As one senior Customs official explained:

> We the Customs here help them and did not posted any of our officers in the US. But some of the European countries did that. But the Malaysian government didn't make any request for that. The reason is because posting officers are not that cheap (Interview Code: 10).

Although the US is Malaysia's fourth biggest trading partner as noted above, Malaysia trusted goods arriving from the US because of their layered security measures. This created less anxiety on the Malaysian side due to the low risk category of the US goods. Therefore stationing Malaysian Customs officers in the US ports was viewed inappropriate. This is reasonably justified if we look at international practice by other compliant states. Out of fifty-one foreign ports participated in the CSI as of 2011 (United States Customs and Border Protection, 2011) with the majority of them in Asia and Europe, only Canada and Japan have stationed at US ports to screen the outbound containers destined for their respective countries (Peterson and Treat, 2008: 11).

In practice the actual number of containers scanned in Port Klang under the CSI has only been a small proportion of the total number of container exported. Table 7.7 provides a complete breakdown from 2005 to 2011 and Table 7.8 provides the percentage to support this argument. According to a Customs official, the small number of containers scanned was primarily attributed for two reasons. Firstly, the US CBP used their own risk assessment to identify any particular container for scanning purpose based on the export manifest submitted by the shipping agents to the US National Targeting Centre. Secondly, US CBP deployed only four staff in Port Klang in the beginning of the CSI implementation and subsequently reduced to one staff in 2011 due to budget constraint. Furthermore, since there were no serious cases detected over the years, they probably consider the Port Klang as a safe port (Interview Code: 10). In this context, the decreased number and percentage of scanned containers over the period as shown in Table 7.7 and 7.8 further approve the safe nature of the Port Klang.

Table 7.7: Number of Containers (TEU's) Scanned Under the CSI Initiative in Port Klang

Year/Month	2005	2006	2007	2008	2009	2010	2011
JAN	26	50	39	44	24	10	11
FEB	36	26	36	18	16	9	6
MARCH	47	60	41	54	33	9	6
APRIL	48	69	46	35	28	10	5
MAY	46	50	55	26	30	14	2
JUN	41	68	37	42	10	12	3
JULY	5	47	40	35	11	17	5
AUG	36	66	54	25	18	1	0
SEPT	0	71	49	21	19	4	12
OCT	0	57	45	35	32	15	0
NOV	0	57	56	49	20	6	0
DEC	60	34	52	34	17	12	0
TOTAL	**345**	**655**	**550**	**418**	**258**	**119**	**50**

Source: Statistics, Royal Malaysian Customs, Selangor, 2011

Table 7.8: Percentage of Containers (TEU's) Scanned Under the CSI Initiative in Port Klang

Year	Total Export of Port Klang (TEUs)	CSI (Scanned TEUs)	Percentage (%) (Scanned for CSI)
2005	1,276,661	345	0.027
2006	1,387,625	655	0.047
2007	1,474,193	550	0.037
2008	1,598,544	418	0.026
2009	1,478,354	258	0.017
2010	1,719,325	119	0.0069
2011	1,720,542	50	0.0029

Source: Statistics, Royal Malaysian Customs, Selangor, 2011
Note: There is no statistical data available for container traffic between Port Klang and US, specifically. Therefore the percentage is calculated based on the total number of TEU's handled in Port Klang with the total number of TEUs scanned.

Due to prior arrangement of the RMC, there was no capital cost of the CSI to Port Klang in terms of purchasing additional scanning devices that could cost in the range of USD 1 - 5 million (OECD, 2003: 52). Nonetheless, a Customs respondent pointed out that there is an indirect cost to cargo owners who will be charged RM200 (USD65) by the terminal operator if their container is moved for inspection for security purpose. Even the OECD (2003: 53) confirms this by stating that "scanning high-risk containers also generates indirect costs linked to the number of container yard moves and time required to get the container out of a stack, to the scanning station, and back". There is therefore a consequential effect where at some point the

same cost will be passed down to consumers. A case study conducted by Azuh (2007: 67) in the context of another developing country, Nigeria, further approves this cost implication to customers. He points out:

> The initial cost of procuring the equipment [scanning machine] falls on port authorities because of the required capital investment. Such costs are passed onto carriers who in turn will recover their cost by increasing the charges for exports. Increased freight rates invariably add to the overall cost of transportation.

Consequently the regime has caused dissatisfaction to the PKA as evidenced from a senior security official's view:

> Like in the EU, if EU says go, they all have to go because the big brother is on the other side, the USA. Of course we had our reservation initially. I personally have my own reservation. Why should we be doing all these when the country is affected is the US. But then we have no choice due to economic pressure. We are all under the flavour at that time. We called it economic blackmail. [The US says] if you don't do this, you don't trade with us. If you don't do that, you don't come to my place. If you don't come to my place, you can't trade. Your export cannot come to my country. (Interview Code: 16)

In this respect, a similar kind of dissatisfaction can also be seen in Azuh's (2007: 66) study as well. He affirms that developing countries are under pressure to comply such a measure in order to avoid losing their business with the US. However, in spite of some dissatisfaction, Malaysia complied with the ISPS Code and other US-led measures due to trade significance and bilateral understanding with the US as stated above.

7.7.2 **Megaport Initiative**

Megaport Initiative is another US-led port security measure established by the US government with the help of the US Department of Energy (DOE), National Nuclear Security Administration (NNSA) and Office of Second Line of Defense (SLD). The principal objective of this programme is to reduce the risk of illicit trafficking of nuclear materials and other radioactive isotopes that might be used in WMD or radiological dispersal devices before they reach the US borders. Again, this programme is implemented as a joint programme through the 'coalition of the willing' with the identified countries. The initiative involves installing radiation detection

equipment to a prioritized list of world's largest and busiest ports (Megaports) to enhance the port's capability to screen container cargo specifically for nuclear and other radioactive materials. To further bolster the measure, on April 2009, President Obama drew an ambitious plan to secure vulnerable nuclear material around the world within four years, calling the danger of a terrorist acquiring nuclear weapons "the most immediate and extreme threat to global security" (National Nuclear Security Administration, 2011).

Similar to the CSI programme, in response to the US requirement, the Malaysian government agreed to be party to it in an effort to curtail any movement of WMD in the Malaysian water. The RMC was identified as a suitable agency to deal with this matter. Since Customs is not familiar with radioactive material, the Atomic Energy Licensing Board (AELB) was included as an additional member as the regulatory body for nuclear and radio activity under the Atomic Energy Act 1984. AELB stands behind to assist and verify any suspected radioactive materials (Interview Code: 11).

The regime was legalised through the signing of a Memorandum of Understanding (MoU) between the RMC and the US government on 27 February 2008. The Megaports initiative is primarily designed to screen as many containers passing through the port as possible. The strategy to achieve this goal is by installing Radiation Portal Monitors (RPM) integrated with Optical Character Recognition (OCR) systems (to identify the container number) located at the selected locations but normally it is placed in a narrow bridge between the container wharf and container yard. The system is designed to monitor movement of all import, export and transhipment containers. The equipment does not emit radiation, hence does not pose any health hazard to anyone. In comparison to CSI which uses human assistance for scanning, the Megaport initiative is equipment focused (free flow of containers through RPM without disruption) where the host country scans all containers regardless of container origin or destination through RPM (National Nuclear Security Administration, 2006, 9). As of 2011, the number of detection units and containers involved in Port Klang under this programme are shown in Table 7.9 and Table 7.10 respectively.

Table 7.9: Number of Detection Equipment Units for Megaport Initiative in Port Klang (2010)

Location	Radiation Portal Monitor			Advanced Spectroscopic Portal
	Entry Gate	Quay Bridge	CSI Station	
Westport	6	13	1	1
Northport	7	5	-	1
Total	13	18	1	2

Source: Heong, 2010: 3

Table 7.10: Number of Containers (TEU's) Involved in Megaport Initiative in Port Klang (2009 – 2011)

Year	Import	Export	Transhipment	Total TEU	Alarm Trigger	Secondary Inspection	% Inspt. with total TEU
2009 (Oct-Dec)	408,406	353,539	1,203,836	2,025775	10,688	-	-
2010	1,716,345	1,719,325	5,434,626	8,870,296	67,523	44	0.000049
2011	1,795,864	1,720,542	6,087,450	9,603,856	51,311	58	0.0006

Source: Royal Malaysian Customs, Selangor, 2011
Note: Although an MoU was signed on February 2008, the official compilation of data by the RMC only available from October 2009 onwards.

Albeit the Megaport Initiative system does emit any radiation, the system however detects any excessive radioactive contents from any cargoes passing through the RPM by sending alarm signals. This alarm signal will be captured through computer monitors in the control room. The number of excessive radioactive content containers triggered by alarm is shown in Table 7.10 above. Nonetheless only the suspicious containers were brought to secondary inspection for further investigation. Thus far no containers were held for WMD reason (interview Code: 10).

One setback of this programme is that although it targeted for 100% screening as mentioned earlier, a senior Customs official who takes charge for this matter admitted that in reality it is quite impossible to achieve 100% screening. The agency only managed to screen 74.5% for the year 2010. Primarily because some of the quay bridges in Port Klang were not equipped with scanner either because it was not suitable or able to accommodate the movement of oversized cargo. Additionally,

when the scanner was down due to technical fault or accident, it disrupted the screening process as well (Interview Code: 10).

Despite being a US-led initiative, this measure is considered a new platform in line with the WCO SAFE Framework that would enhance global trade and port security. As a member of the WCO, the Malaysian government is obliged to implement the Framework's requirement to maintain a certain level of security along the supply chain in order to sustain well balanced trading activities with the US (interview Code: 10).

In any case, although the US initiated this measure on a voluntary basis, it was smartly designed in such a way to incorporate into WCO SAFE Framework, an international regime required to be implemented by Customs member states. This would enable member countries especially the exporting country to scan the containers if there is a reasonable request apart from fulfilling the US needs. One Customs respondent affirmed that "one of the justifications is that by taking part in the Megaport initiative we comply to the WCO SAFE Framework of Standard" (Interview Code: 10). Presumably if Malaysia had refused to participate in this regime, the US would have directed the containers to other ports for a better risk assessment and treatment from the US CBP such as Singapore and Laem Chabang ports. Therefore another Customs official commented "as a policy maker, you don't have any choice…the best approach is to practice international practice" (Interview Code: 11). This is a reflection of how the unilateral approach of the US has greatly influenced the international maritime players by giving them no option if they want sustainable trade with the US.

Despite the fact that the initiative involves only a small percentage of secondary inspection as against the total number of TEUs handled in Port Klang since its implementation as shown in Table 7.10 by registering 0.00049% and 0.0006% in 2010 and 2011 respectively, a direct result of such arrangement led to some dissatisfaction as it seen solely for the interest of the US. The same Customs official commented:

> The problem is everything passes through Megaport sometime the final destination is not to US. So they cannot find the logical explanation. Why should we scan for US? Why should be borne by the additional cost just because the Megaport is US-led initiative? The question maybe sends back to the government, why they signed the agreement. I don't know myself whether Malaysia itself in a very difficult situation because once you signed, the US has invested around, we don't know how much, but in millions (Interview Code: 11).

A similar dissatisfaction was felt by port users. The Head of Federation of Malaysian Freight Forwarders commented "I feel that the government should not follow hundred percent what the American wants for their requirement" (interview Code: 26).

In another context, the port operator expressed a similar feeling "are we really qualified to handle the radioactive material? Port doesn't have that kind of equipment to handle. I am not the owner of the Megaport. Even for the CSI, the Customs is relying on us. This is a problem now. If anything happens, it will be a problem. I am not a radioactive proof [port]" (Interview Code: 21).

Moreover, the initiative also has implications of costs and other additional effort and resources. This will be discussed in the following chapter (Chapter Eight).

7.8 **Strategic Trade Act 2010**

Corresponding to the Megaport initiative compliance, the Malaysian government has committed the country to another form of legal regime at national level to enhance the non-proliferation of WMD. The regime is established by the Strategic Trade Act 2010 (STA) or Act 708. The primary objective is to enforce border control which also includes ports. The Malaysian Parliament passed this legislation on 5 April 2010. However the full implementation of STA, Regulation and Orders only commenced from 1 April 2011 (Jaafar, 2011: 11). The aim of STA is "to provide for control over the export, transhipment, transit and brokering of strategic items, including arms and related material, and other activities that will or may facilitate the design, development and production of weapons of mass destruction and their delivery systems and to provide for other matters connected therewith, consistent with Malaysia's national security and international obligations" (Strategic Trade Act, 2010:7).

The Malaysian government's decision was in tandem with its effort to curb any proliferation of WMD when there was a discovery of WMD substances in October 2003. A Malaysian company – Scomi Precision Engineering Sdn Bhd, was identified in manufacturing and shipped high-quality centrifuge components for use in Libya's nuclear programme. The centrifuges, sophisticated machines that can be used to enrich WMD were seized under the US-led PSI by the US authority (Simon, n.d: 1). Although Malaysia denied the US accusation by claiming that "the parts were for the oil and gas industries in Dubai and that it had no knowledge of the Libyan connection (Sodhy, 2007: 39), the incident apparently reminded Malaysia of the necessity in taking precautions and complying with the US protective measures.

Ideally the act is meant to curb dual purpose items that could be used as WMD. The potential items in this category are products and materials commonly used in civilian applications such as electronics, computers and avionics and therefore classified as 'strategic items'. Nonetheless these items are also raw materials for weapons and their delivery systems (The Star Online, 12 December 2010).

When the Malaysian Prime Minister, Datuk Seri Najib Razak attended the Nuclear Summit in Washington and had a bilateral meeting with the US President, Mr Obama, it was argued that the STA was "a political olive branch" (Star online, 30 September 2010).

In contrast to other port security measures, the STA has been placed under the purview of the Ministry of International Trade and Industry (MITI) because of MITI's lead role in dealing with trade matters. Since the STA involves dual purpose trading items, it works closely with eleven other government agencies for effective enforcement purpose.

According to a senior official from an enforcement agency, since the legislation passed in 2010, the responsible agency was still working on the Standard Operating Procedure (SOP) for effective implementation of this new law. There is evidence that the STA regime created some anxiety among the shipping agents and brokers because of the unprecedented statutory penalties as stipulated in subsection 9(4) of this act.

With the threat of the shortest imprisonment of five years to a penalty RM5 million (USD1.6 million) to a maximum level of capital punishment and RM30 million (USD9.7 million), STA is not welcomed by the port industry players. Asked whether the industry is in favour, the President of the Federation of Malaysian Freight Forwarders, who is also the acting President of Selangor Freight Forwarders & Logistics Association, he argued:

> But for Strategic Act [the answer] is no…Here the Act looks like going to be very difficult for you to comply. You have to get approval and apply for permit. Malaysia is not a country manufacturing any nuclear or weapon parts. Then why are you wanted to implement this? Malaysia is not a terrorist country. If you look security per se, Malaysia is very safe. There is no big implication. Unless the Strategic Trade Act is implemented, it is too early for the industry to say the impact. We do not know how they want to put it in regulation too (interview Code: 26).

Even a respondent from an enforcement agency responded in a similar tone:

> I think it is quite draconian Act and worse than other act. But I'm not quite sure. The users are going to be scared. The export of dual purpose goods lets say caused death. So these fellows will also be punished with that. It is a capital punishment and the jail term is fifteen years.

Although the legislation is considered too harsh by such users, it has proved a good instrument for the authorities. This was evidenced in an effort by the police in 2011 to interdict shipment of WMD materials. Upon receiving some information, the police managed to detain a ship from China bound for Iran anchored at Westport on 17 March and seized two containers believed to contain weapon components. According to Inspector-General of Police Tan Sri Ismail Omar, the investigations were carried out under the STA. (Star online, 17 March 2011).

7.9 **Maritime Enforcement (Institutions)**

As has been shown, the introduction of the ISPS Code, CSI, Megaport and STA has added to the responsibilities of the various maritime agencies and created new roles. It has also added to the complexity of the Malaysian system of maritime governance, as shown in Table 7.11. The table generally signifies that there are many government agencies involved in the maritime enforcement duties based on the provisions of a

large number of legal instruments. Naturally such arrangements entail considerable amount of resources and coordination for effective security measures. But seemingly there are certain setbacks, elaborated further below.

Table 7.11: Ordinances and Acts Enforceable by Various Maritime Enforcement Agencies

Ordinances and Acts	Navy	Police	Fisheries	Marine Dept.	Customs	Dept. of Environment
Police Act	Yes	-	-	-	-	-
Penal Code	Yes	-	-	-	-	-
Criminal Procedure Act	Yes	-	-	-	-	-
Merchant Shipping Ordinance Act (Oil Pollution) 1994	Yes	-	-	-	-	-
Merchant Shipping Ordinance Act 1952	Yes	-	-	Yes	-	-
Fisheries Act 1985 (Amendment 1993)	Yes	Yes	Yes	-	-	-
Exclusive Economic Zone Act 1984	Yes	Yes	Yes	-	-	-
Petroleum Mining Act 1966	Yes		-	-	-	-
Environmental Quality Act 1986	Yes	Yes	-	-	-	Yes
Continental Shelf Act 1966	Yes		-	-	-	-
Customs Act 1967	Yes	-	-	-	Yes	-
Immigration Act 1959 (Amendment 1963)	Yes	-	-	-	-	-
Petroleum (Safety Measures) Act 1984	Yes	-	-	Yes	-	-
Telecommunication Act	Yes	-	-	-	-	-
Dangerous Drugs Act 1952	Yes	-	-	-	-	-
Explosive Act 1957	Yes	-	-	-	-	-
Protection Places Ordinance Act 1959	Yes	-	-	-	-	-
Internal Security Act 1960	Yes	-	-	-	-	-
Firearms Act 1960	Yes		-	-	-	-
National Security Directive No.18	Yes	Yes	-	-	-	-

Source: Kasmin, 2009: 36

It is helpful to explain the issue of maritime enforcement in view of its connection to the port security in a broader context. The existing enforcement system according to Kasmin (2009: 32) was designed prior to Malaysia's independence from the British government. The British enacted those marine related acts and established various agencies similar to those in the UK to ensure control of maritime sector. This was then continued even after Malaysia gained independence in 1957. Critically however such arrangement has created some consequential effect to the port security measure.

Since independence, Malaysia has extended its territorial waters from three nautical miles to twelve nautical miles and claimed continental shelf and exclusive economic zones. In response to protect the maritime sector from numerous kinds of threats as well as preserve the sovereignty of maritime zones, the government has enlarged its maritime enforcement agencies, giving additional task to its agencies and also established additional departments to carry out surveillance and monitoring in the maritime zones (Kasmin, 2009: 32).

As a result of different institutional arrangements, the Royal Malaysian Navy thus undertook the nation's defence at sea, while the Marine Police concentrated on prevention of criminal offences. However smuggling of goods is enforced by the RMC. Fisheries Department enforced federal laws on fisheries whereas mangrove swamps for sea creatures fall under the jurisdiction of the Forestry Department. Incident relating to oil pollution involves both the Marine Department and Department of Environment even to the extent State government can exercise jurisdiction if some protected marine animals affected by the oil spill (Ooi, 2007: 74-75).

These impediments incurred heavy expenses to the government in terms of budget allocation to each agency. Further, a lack of coordination among these agencies hampered effective enforcement measures. In 2005 the government amalgamated eleven different enforcement agencies under one roof by establishing the MMEA to reduce these problems and bolster the enforcement measures as briefly explained in Chapter Five (Ooi, 2007 :90).[36]

[36] The established of MMEA as a Coast Guard of Malaysian was approved by the Cabinet on 21 August 2002. Following which a Nucleus Team was set up at initial stage on 16 April 2003. Upon the

Despite the MMEA now playing the key role in enforcing the costal surveillance, other agencies still carried out maritime related activities. One respondent from the PKA alluded to the implications of this complex enforcement system:

> In US it is very clear. Customs and Border patrol. They took the initiative. Whoever is there, they said they are looking after the land; they are looking after the port, they are looking after everything. They all come under one Ministry, Homeland Security, that's it. Here in Malaysia, Customs under the Ministry of Finance, Police under the Home Ministry, ports under the Ministry of Transport, Immigration under the Home Ministry, Health is under the Health Ministry. The guy who brings disease, the Home Ministry is not in charge of it. The Health Ministry is still in charge. How they coordinate the work, we do not know… coordination and overall responsibility are some of the major problems (interview Code: 16).

The MMEA itself faces some restrictions on effective enforcement. As the government decided to transform the MMEA into a sole law-enforcement agency by the end of 2011, it is expected to bear more cost for producing additional equipment. Some of its 130 vessels currently (2011) operational are in run-down conditions since acquired from other agencies. For government it is expected to incur heavy expenses for maintenance. In addition, the MMEA also faces inadequate personnel, equipment and airbase (Bernama, 8 June 2011) and all this may cause concerns about the maritime security.

The motivation for the creation of the MMEA was not, however, reducing the complexity of the local maritime system of security per se. It involved issues of sovereignty. As a member of ASEAN, Malaysia subscribes to the key founding principals of this grouping that among others include mutual respect for each country's independence, sovereignty, territorial integrity and non-intervention in the internal affairs of another state (Teo: 2007: 548). These principles become one of a protective measure for safeguarding the regional waters from external forces. As a result, the proposed plan of Regional Maritime Security Initiative (RMSI) by the US in SOM pursuant to 9/11 sparked unhappiness among the ASEAN members. The announcement made by Thomas B. Fargo, former Commander of the U.S Pacific Command on 31 March 2004 "we're looking at things like high-speed vessels, putting Special Operations Forces on high-speed vessels to conduct effective interdiction in,

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gazette of MMEA Act (Act 633) on July 2004, the MMEA was officially launched and undertook its operation on 30 October 2005 (Satria Maritim, 2009: 4).

once again, these sea lines of communication where terrorists are known to move about …"(Raymond and Morriën, 2009: 9) created enormous objections from the Malaysian and Indonesian authorities to another type of unilateral measure of the US, spreading their influence in the name of antiterrorism/piracy.

Malaysia suspected that the US presence was to contain China's increasing influence in the SOM by blowing up the terrorism threat in order to start an inspection regime that will have the effect of limiting China's access to oil, other raw materials, technology and industrial equipment (Teo, 2007: 549). However the fundamental reason for keeping the US physically away from the Straits was to circumvent any religious backlash or sudden attacks as the region is surrounded by a large number of Muslim populations. In 2005 Datuk Seri Najib Tun Razak when holding the Ministry of Defence portfolio asserted that "the presence of foreign troops in our waters would trigger public anger and breathe new life into terrorist groups". However Malaysia is willing to extend collaboration and receive practical assistance involving training, technology transfer and supply of equipment as long as the development of foreign troops in the straits was not entailed (Teo, 2007: 549-550). One respondent involved in national security policies commented upon this aspect:

> Normally in terms of policy implication we are very careful. For example we don't want foreign countries to take charge in the Straits of Malacca. We don't want them to come here like what they did in Somalia. We are very cautious that whatever we do, it doesn't mean that we are opening up the Straits of Malacca to foreign Navy. We are careful in that sense. This is more for the sovereignty issue (interview Code: 10).

To heed the international calls for a security crackdown in this region while hindering any interference of the US in the SOM, the Malaysian government established the MMEA. Although the objective of MMEA was to change from a 'sectoral' approach of maritime enforcement to a 'singular dedicated agency', Ooi (2007:90) argues that MMEA was predominantly a direct result of the US pressure and "by-product of Malaysia's political reaction to the threat of armed forces from arguably one of the most formidable military powers on earth being stationed at strategic places along the Strait of Malacca, effectively taking away control of the Strait of Malacca from the littoral states".

Arguably, looking at another ankle, as an 'advanced' developing nation with heavy dependency on international trade as well as adopting relatively a friendly foreign policy with regional member states and the US, Malaysia therefore is obligated to adopt certain measures to reflect its sincerity to fight against maritime crimes not only for the benefit of local needs but also for the regional and international demands.

7.10 **Security and Regional Co-operation Organisations**

Despite the issue of sovereignty is regarded sacrosanct among the regional member states, multilateral cooperation is sought as an additional method of resolving the shortcomings of any bilateral measures. When the IMO initially introduced the ISPS Code, the intention was to create an international framework applicable to all maritime fraternities across the board globally. Yet there were criticisms the Code does not provide a uniform global standards and clear guidelines due to different governmental interpretations of the Code's requirements (Anyanova, 2007: 28-30). Furthermore, certain geographical areas were identified as unable or unwilling to meet the Code's requirement that resulted to different standard in different places. (Burmester, 2005: 193). In this connection, Azuh's (2007: 75) finding closely corresponds to this argument:

> In some developing countries, the ISPS and its intentions were misinterpreted by some policy makers as the need for mobilisation and installation of equipment only. The most important aspects such as motivation of people, awareness, training, creation of legal infrastructure, auditing and documentation requirements were not properly addressed.

A similar kind of ISPS Code interpretation exists even in developed nations as well. For example Wengelin (2006: 7) who studied port security in Swedish ports proves this matter by quoting two good practical expressions shared by the local port security officers. They said:

> We [PFSO] sat a whole day, and night, with this man [port inspector] and finally more or less decided… we have to do exactly what he says, we don't have a choice because he has made up his mind that we have to do what he says. And so it was…

And

> We [PFSO] sat here and discussed things, and we changed the plans according to how the inspector wanted it. That was how we got our certificate here…

In this respect, looking at Port Klang's context, the head of the ISPS Unit of Marine Department in Malaysia asserted when it involves regional understanding, there is noticeable disparity as compared to other parts of the world:

> Within our region there is no problem as we know each other. Why we take this region as one group because of our common culture and the pattern is almost the same. That is why we cannot use the US module. We don't use module from Europe because it is different. Their culture, character and condition are very different. Even their water and expose to risk are also different (Interview Cod: 08).

In response to this kind of mentality, a regional approach has been adopted to strengthen the level of maritime security through the sharing of knowledge and expertise. Although, as noted earlier, Malaysia does not regard terrorism as a particular threat to itself, SEA is perceived to be a breeding ground, resulting in numerous terrorist groups with some form of relationship with the Al-Qaeda organisation. The evolving threats though look serious but still manageable (Ressa, 2003 and Chalk at el, 2009). There is the fear that this group may resort to maritime terrorism as Raymond and Morrien (2009: 6) have pointed out. This forged cooperation among the ASEAN member states to safeguard the port and the shipping sector.

Malaysia is an active participant in the ASEAN Port Association (APA).[37] One of the respondents, Chairman of the working committee for APA, asserted that the issue of

[37] The ASEAN Port Authorities Association (APAA), now the ASEAN Ports Association (APA) was established in 1974. The APA was originally envisioned as an organization that could provide the proper forum for the achievement of the following broad objectives: exchange of information, harmonization of trade practices, and promotion/facilitation of trade among ASEAN ports. APA was conceived to provide a venue for port officials concerned to meet and share experiences that may lead to finding solutions to identified problem areas and emerging issues affecting the port sector. The forming of the Association represents the collective will of the member-ports to foster friendship, extend support and cooperation to promote the interests of ports. The Association is presently composed of regular and associate members collectively recognized as members by the Association. Regular members are those national port authorities and/or the country ports with the government retaining majority interest while the corporatised or privatised ports joined as associate members (ASEAN Ports Association, 2011).

port security was frequently discussed, and knowledge and experience shared. He said that "when the ISPS was really at its height for ports to attain it, that was one of the subject matter discussed. We all shared our burden. In a sense that we wanted to be an ISPS compliant" (Interview Code: 03).

Another fora where port security has been actively deliberated is the ASEAN Maritime Transport Working Group (MTWG). The working group provided a good platform to discuss various interrelated ISPS Code issues during the early period of implementation. The MOT plays a lead role on behalf of the Malaysian government and has been involved in several discussions on policy and practical issues concerning safety and security of the regional waters. An official involved directly on this matter highlighted that "some countries are more advanced than us so [benefited from] the programme under the MTWG to help other less developed nations through exchange of expertise by conducting seminars or workshop, train the auditors whereby the auditors will come to a particular host county then they will conduct seminar and workshop on how to be an auditor (Interview Code: 01).

At the littoral states level, the establishment of Tripartite Technical Experts Group (TTEG) for safety of navigation for the SOM that involves Malaysia, Singapore and Indonesia provided another platform for security consideration. The TTEG provides the option of burden sharing for member countries to buttress their safety of navigation and record of protection of the marine environment. A TTEG meeting in 2005 outlined six main projects for implementation. One was related to security involving a demonstration project of Class B Automatic Identification System (AIS) transponder on small ships (Nik and Permal, 2008: 196). In subsequent meetings, according to an MOT official, the TTEG discussed matters concerning the ISPS Code as the Code directly relates to SOLAS and aids to navigation. Albeit the TTEG is mostly concerned with safety, occasionally the issue of security is deliberated because of the ISPS requirement for both port and shipping sector (Interview Code: 01).

The Marine Department as a DA for Malaysia had a lead role in the port security awareness programme by participating in APEC's ASEAN and Japan Port Security Expert Meeting. Under this programme all DAs of ASEAN member states will join together in sharing and seeking information, including that relating to the required training and technical expertise (Interview Code: 08). Malaysia conducted two

seminars in November 2008 and 2009 for the Asean-Japan Maritime Security Joint exercise. At the end of the seminar they had a round table discussion related to the ISPS implementation (Interview Code: 08).

Interestingly, when the Marine Department initiated a specific programme for Malaysian ports involving various groups of participants, other ASEAN DAs also participated through a communication link. The programme was designed to provide a real time situation in the event of a terrorist attack on a port that might affect other member countries and to find ways to mitigate this effectively. The same respondent believed that through such communications they had managed to forge a close relationship among themselves. He said "we have direct line numbers and email. We can contact them directly. That is why during the Port Security Expert Meeting we always meet each other. We know each other. Within our region there is no problem as we know each other. That is why we take this region as one group because of our common culture" (Interview Code: 08). In this regard, the common culture of this region provides good basis to understand the common security threats in the regional water. Essentially such information can be very useful to strategise for better and well coordinated security initiatives along with other member states.

7.11 **Conclusion**

This chapter has attempted to provide an account focusing on Port Klang in a range of port security measures, institutional and organisational arrangements. It also discussed the key organisations directed at the threat of terrorism implemented in Port Klang after 9/11. It has shown that although security threats at Malaysian waters are under control, due to strong sentiment in maintaining national security matters, the government is always cautious and tries to achieve protection by imposing strict security measures. The government utilised several key instruments, comprising the ISPS Code international regime, and other UN based agreements together with the US-led initiatives, the CSI and Megaport which were then transposed into national context. These measures supplemented Malaysia's own security measures that were implemented before 9/11.

Evidently the reason for the multitude of security measures is placement of port under the category of essential services which need protection. Being a contracting party to

the SOLAS 1974 Convention, Malaysia is obliged to implement the ISPS Code and also comply with the UN Security Council Resolution 1540 binding on all the UN members. In this context, Malaysia's pre-9/11 port security instrument, the Protected Areas and Protected Places Act 1959 (Act 298) provides a good platform to comply with the ISPS requirements rather smoothly. But evidences presented in this chapter clearly indicate that this was carried out according to local needs and enforced beyond the ship/port interface. Adding further to a practical point of view, the imposition of severe penalties was perhaps designed as a demonstration to a national and international audience of the strong commitment of the Malaysian government to counter-terrorist measures. Though there were arguments to suggest that Malaysian waters are safe and free from terrorism, yet the government imposed various security regimes on the ground that enhanced port security was fundamental to sustainable international trade. In a broader foreign policy context for Malaysia's international economic and political interest, the country is not seen in a way to be 'soft' on maritime terrorism. Analysing the same politico-economic perspective, Malaysia also needs to demonstrate a well balanced relationship with US particularly as there was an element of power-play between these countries. As such, Malaysia took the initiatives of complying with not only the international regimes but also the US-led measures, particularly the CSI and Megaport. Corresponding to this power-play, the Malaysian government also initiated its own legal instrument at national level, the STA, to curtail the movement of WMD. In addition to this, the establishment of MMEA as a single maritime enforcement agency was attributed as a result the US pressure.

Holding the position as a premier port, the Port Klang particularly needs well balanced measures to maintain investor and user–confidence in the level of port security. As Cant (2010: 13) suggests the issue of port security "becomes a question of image, a significant criterion for quality, a selling and a business qualifier", nonetheless from the users point of view port security measures may be seen as excessive and causing a burden in many respects.

From another perspective, in spite of different responses from different stakeholders, those security measures were influenced by issues of sovereignty. Being part of the ASEAN, Malaysia and the regional countries object to the principal of sovereignty of

their waters being undermined by the presence of any external forces. To preserve the sanctity of this principal and reciprocally enhance its security measures, the Malaysian government initiated a host of bilateral and multilateral measures in cooperation with the US and regional member states. Despite, however, the range of measures introduced to bolster the level of security in ports, the research has identified a number of practical problems and challenges encountered in implementing these as will be discussed in the next chapter.

CHAPTER EIGHT

PRACTICAL PROBLEMS, CHALLENGES AND IMPLICATIONS OF PORT SECURITY MEASURES

8.1 Introduction

The preceding chapter elaborated various security measures introduced after 9/11 at different levels and their institutional arrangements, as they applied to Malaysian ports in general and Port Klang in particular. This chapter looks now at the practical aspects of these port security regimes: the problems, challenges and implications. In this perspective, it takes into account economic cost, human factor and loopholes in the security system.

8.2 Cost implications

Several studies have highlighted the cost element as one of the adverse consequences of realising the full potential of security measures introduced since 9/11. As has been shown, a raft of regimes emerged as a result of 9/11, including the ISPS Code. A global study conducted by the OECD (2003), IAPH (2006) and UNCTAD (2007) in relation to ISPS Code implementation following its enforcement on July 2004 as mandated by the IMO provided some plausible evidence of various economic consequences and cost effects. The study initiated by the OECD (2003) in a global dimension on the risk of terrorist attacks and terrorist threat to the international merchant marine transport system and the cost implications of security measures to the users, estimated that the initial burden for ship operators would be at least USD1,270 million and USD730 million per year thereafter. On the other hand, the UNCTAD (2007) estimated the global port related sector would bear the cost in the range USD1.1 billion and USD 2.3 billion initially and approximately USD0.4 billion and USD0.9 billion annually thereafter. For the US alone based on its own assessment, the cost to its ports was estimated to reach USD1.1 billion for the first year and USD656 million each year up to 2012 (Bichou, 2004: 330). There were also further costs identified. Bichou (2004) examined the broader cost implications by integrating port and supply chain security. Going beyond ports and shipping, Erera et.al (2003) provided an insight into various other costs incurred as a result of new

security measures for many of the users and providers of the international freight transportation system.

The cost of the full implementation of the ISPS Code produced particular dissatisfaction among developing countries, which perceived themselves as less able to afford these than were industrialised nations (Khalid, 2005: 6-7). In that order, Ng and Vaggelas (2012: 676) claim that "the application of security regulations requires substantial investments and thus creates additional barriers in the port industry, especially for small ports and ports located in poor countries".

In Malaysia, a survey conducted in the beginning period of the ISPS implementation in 2004, the total cost was estimated to be RM81 million (USD26 million) for the whole of Malaysian ports (Osnin, 2005: 22). Such estimates reflected the fact that there was no escape from the cost consequences of the technical and physical requirements of the ISPS Code, despite the fact that, as argued in Chapter Seven, the implementation of the ISPS Code was not such a serious problem for the Malaysian Federal ports due to the good security infrastructure and practice prior to 9/11. Most security regimes are technologically based and require investment for initial acquisition and also subsequent expenditure for maintenance to sustain functionality.

In the early period of the implementation of the Code in July 2004, the Marine Department had made an estimation of RM16 million (USD5.2 million) for Port Klang alone (Ja'afar, 2007: 200). As the premier port in a developing country, Port Klang might have been expected to encounter financial difficulties in introducing the ISPS Code. While Port Klang was not exempt from some additional costs in terms of acquisition of technological devices and security training, these costs however, did not cause a major problem for security implementation, when looking at the overall process of port transformation. As has been shown, Port Klang had gone through a long process of development with privatisation that led to port modernisation at different levels in both terminals. This includes the security equipment installation. As the Malaysian Federal ports are secured under the Protected Areas and Protected Places Act 1959, this has paved the way for a rather smooth implementation of the Code due to certain technical similarities. An official from the Marine Department explained,

> The implementation on the technical requirement [Protected Areas and Protected Places Act, 1959] is almost there. Every Federal port in Malaysia implemented it. In that sense, we are lucky. It is a standard and applies to all Federal ports in Malaysia. We have only involved in the documentation control. All the required physical structure is already available (Interview Code: 08).

Asked whether the cost of the ISPS implementation has been a problem for Port Klang, the same respondent responded:

> They [Port Klang] did not face much cost. The only cost is for training. They have to upgrade their training in terms of safety and have to add the security element…So for that reason, they have to send [personnel] for extra training. Last time, the security personnel check for the lighting which is safety but now more on security. We have to understand that. There is not much additional cost.

While this government official saw costs of implementation as minimal, the terminal operators' view was very different. A chief security official of one terminal argued that "costing is the biggest impact...it involves a huge capital expenditure. [38] We have to spend a lot for the protected area. Last time there was no CCTV, but now we have installed CCTV, grill and unbreakable glass. We spent almost a million. That is the ISPS requirement (interview Code: 21). A respondent from the PKA also highlighted the expense to terminals, estimating that the amount these spent for the Code was approximately RM5 million (USD1.6 million) over the period 2005 to 2010. (Interview Code: 16). Although the view of the terminal operator is contrary to the view of the government official, given the fact that the privatised company operates the port on commercial and profit interest, naturally any additionally expenditure is a matter of concern to them. Nonetheless, the terminals were managed to absorb those cost without much problem considering the proportion of security expenditure against the total revenue of the port is very minimal. For example, the total revenue of the Northport before taxation was RM158 million (USD50.9 million), RM188 million (USD60.6 million), RM144 million (USD46.4 million), RM148 million (USD47.7 million) and RM171 million (USD55.2 million) in 2006, 2007, 2008, 2009 and 2010 respectively (NCB Holdings, 2010: 15). Hence, calculating on the basis of average total revenue for five years (RM162 million) (USD52.2 million) against the average

[38] The term "terminal operator" and "port operator" is used interchangeably throughout this study. It refers to same entity, that is, the private company which operates the port.

annual security expenditure (RM1 million) (USD322,580) for the same period, the amount suggests, the terminal's annual expenditure for security need is very minimal, that is, approximately 0.62%.

There was initially a major concern that the implementation of the ISPS Code would escalate port operation costs which would be transferred to end users ultimately. However the MOT - the policy making body of the Federal ports in Malaysia – decided not to impose any security charges to users. *Lloyd's List* (February 2004), reported "Malaysia's two main ports, Klang and Tanjung Pelepas, will not be imposing a security surcharge. Whatever costs of installing and mobilising safety equipment will be borne by the individual terminals, namely Northport and Westport". This was verified with the person in-charge of security in PKA during my field trip in July 2010. He confirmed:

> They [terminal operators] don't charge from the users. The only time they charge is when ship comes into the port and the captain requires for an additional security guard to be placed at the gangway. They will charge for that service. This is after 9/11. Prior to 9/11 there is no security charge for anything. Nobody wanted the security guard for the ship because the port is already considered as a safe place. We don't get any Federal fund as well (interview Code: 15).

The same respondent claimed that one particular reason for government not imposing any security charge was that the government has no intention of burdening the shipping community. The main argument was that "we want to be as competitive as possible" (Interview Code: 15). Government would not wish to damage competitiveness by making its ports, especially the Port Klang, the main gateway for seaborne trade, expensive for users. Therefore the cost of the ISPS requirement was borne by the port operators. Furthermore, the government and terminal operators had made an arrangement earlier through the privatisation agreement that the cost of security is borne by the private operators as part of their operational costs (Interview Code: 02).

At the same time there is plenty of evidence that the Malaysian government accepted the link between a strong security regime and competitiveness suggested by Khalid (2005: 6): "Naturally, in these security-conscious times, ports accorded with high ranking for security measures, such as those taken in line with the requirements of an

initiative like ISPS, would pull in more shipping lines than ports with poor security features or perceived to be unsafe. Therein lies a correlation between security features at ports and their competitiveness". Similarly, Ng and Vaggelas (2012: 676-677) hold the same belief that "port security influences port's efficiency and hence competitiveness, which in turn influences the competitiveness of modes". Charges for security by the terminal operators perhaps suggesting to shipping lines that there was a local problem might therefore also indirectly affect competiveness.

Although in overall, the cost factor of the ISPS Code is under control for the purpose of maintaining the port competitiveness, in another dimension, fulfilling the Code's requirement for practice drill and exercise has indirectly burdened the PKA and the port operators. The objective of these, as it stipulates in the ISPS Code (2003: 98), "is to ensure that port facility personnel are proficient in all assigned security duties, at all security levels, and to identify any security-related deficiencies which need to be addressed". However, expenditure on such training is considered a liability by both the PKA and the port operators. As one respondent in charge of the Security Unit of PKA explained "to them (port operator), maybe [the reason is] money. Because if they want to conduct full drill, it will cost about RM20,000 (USD6,500). So mostly they conduct the table talk only. The actual drill did not carry out. Because it cost money" (Interview Code: 17).

What seems apparent in this context is that for cost reasons the drill and exercise requirement of the ISPS Code is merely fulfilled for a bureaucratic purpose, to be minimally compliant, rather than taking into account the actual rationality or reality in combating maritime crimes. As Metaparti (2010:733) suggests "ISPS is being treated as a mandatory bureaucratic hurdle instead of a continuous operational process". Looking at a broader perspective, this view is demonstrated in Azuh's study (2007: 73-74). He quotes two good examples of developing nations reaction or dissatisfaction with regards to the ISPS compliance:

> Obviously they [terrorists] are not concerned because nothing is happening in Vanuatu and the question is why we should spend money when we do not have any threats. Nobody will come to Vanuatu to throw bombs.

And

> Compliance on paper was a lot easier, however whether the port facilities were in place, is a totally different matter. Come first July [2004], most third world countries including South Africa complied, more on paper than in real terms.

In a closely related context, Ng and Gujar (2008: 271) shared a response of an interviewee from a major Asian port in their study:

> International terrorist attacks were mainly targeting the US and the West…those maritime security international guidelines were actually established with the core objectives of protecting them…and what was the point for us commit such substantial financial obligations? It was simply the tactics of the West in shifting part of their burden [to Asian countries and regions] so as to protect their own interest.

Hence, some Asian countries still considered port security as a problem to solve rather than making a firm stand that good security could be good business. As a result of this;

> The process of compliance had remained stagnant in many Asian countries, while for others the issue seemed to have quickly faded once the basic mandatory requirements had been fulfilled...The concept and focus of port security in Asia was significantly different from that of the western, developed countries and regions. Since 11 September, while the latter had put its security focus on fighting terrorism, it was certainly not the case in Asia, and the commitment to comply with the ISPS Code was of the half-hearted, and the notion that higher security would enable ports an opportunity in creating additional values to shippers was simply overlooked (Ng and Gujar: 2008: 275).

Notwithstanding the ISPS Code is perceived to be fulfilled for bureaucratic purpose that eventually created a sense of dissatisfaction amongst many developing nations, the Port Klang particularly managed this problem in relatively good manner without affecting the Code's effectiveness. On the matter of cost implications, it is worth noting that there are different perspectives which may account for the differing assessments of the burden revealed in interviews. Although there is a cost element embedded in the ISPS Code due to its technical requirement, the cost appeared to be more obvious to the terminal operators as they are mandated to conduct regular training, as well as to install the required technology. But as stated above, the operators have managed this within their financial capabilities. On the other hand, the

regulatory duties of the port authority as the MTSO, do not require heavy expenditure. Their needs are more for the training and drill which in most cases can be carried out in collectively with the terminal operators and the DA to reduce the monetary costs (Interview Code: 17).

In another spectrum, the Megaport initiative as explained in the previous chapter, prompted the Obama administration to appropriate USD2.5 billion in 2012 and USD14.2 billion for both national and international need over the next five years (National Nuclear Security Administration, 2011).

This initiative essentially is equipment or technology based measure that naturally entails capital expenditure and subsequent maintenance. As such, the initiative comes with a cost. The US DOE supplied and installed the equipment free of charge and is committed to free maintenance for a period of only three years. Though it was free for Malaysia, the actual cost incurred by the US for this purpose was estimated in the region of RM50 million (USD16 million) (interview Code: 11). The cost that follows after three years is nonetheless a matter of concern for the RMC in Port Klang's case. They have to bear costs of:

a) routine maintenance such as cleaning up the equipment, replacement of parts/accessories etc;

b) replacing aged/damaged equipment;

c) replacing equipment due to technological changes;

d) communication such as subscription fees for internet line to enable mirror cast to be sent to AELB (Heong, 2010: 6- 7).

Further, in case of the secondary inspection where the container needs to be moved from the yard to the Secondary Inspection Station and back to the yard, there will be an Extra Movement Charges (EMC) imposed by the terminal operator to the shipper. The charges are: 20' container: RM65.00 (USD21) per move and for 40' container: RM100.00 (USD32) per move (Heong, 2010: 6- 7).

In this sense, the inspection cost is borne by the shipping agent. One Customs official involved directly in this initiative asserted:

> The cargo interest bears the cost. If you are unlucky, if they [Customs] scan the container, you have to bear the cost. There won't be any voluntary scanning... They [shipping lines] did complain but the DG of Customs made a decision that it is a practice elsewhere…this is not a port tariff. This is an additional tariff, an additional cost [for the users]…This has caused some form of economic implication (Interview Code: 11).

Apart from the Megaport Initiative, there is a cost implication even for the CSI as stated in Chapter Seven that impacts on the users explained by another Customs respondent:

> Lets say we take last year's [2009] statistics, one month average is about 50 to 60 containers [scanned]. One container for extra movement would cost more or less about RM200.00[USD65]. So one month about RM10,000 [USD3,200]. So it is not that deep. Eventually this amount paid by the owner of the container. They pay to the terminal operator. The shipping agent and Customs broker only pay on behalf of cargo owner. Subsequently they reimburse from the cargo owner (Interview Code: 10).

Essentially, the key objective of the Megaport initiative is to detect radioactive materials that can be used for WMD and is intended to safeguard the US waters but such inspection appeared to burden the port users financially. A senior Customs official pointed out: "of course there is protest from the community side [port users]. The US is not willing to bear the cost" (Interview Code: 10). Another Customs official who for various reasons was often involved in dialogue with the port users reported that "the community says this [Megaport Initaitive] is rubbish" (Interview Code: 11). He considered that in practice the additional cost would ultimately be transferred to the end users so that "this additional cost would increase the cost of the consumer products". The user's dissatisfaction in this respect was itself noted in the previous chapter.

It should be noted however, although the MOT decided that there should not be any security charges imposed by the terminal operators in Port Klang instead the charges should be absorbed as part of their port operational cost, there seemed an element of security charges exist for the CSI and Megaport Initiative. As explained by one of the officials of the PKA, "this is not port tariff, this is the additional tariff, additional cost" (Interview Code: 02). Thus, this type of security charges is considered additional charges that are not controlled or imposed through official port tariff set by

the MOT. Since the port is operated by the private entities on a profit orientated basis, some minor charges were imposed to recover their operational cost.

8.3 **The human factor: problems of workload and attitudes**

Generally a vast number of human supports are involved in the maritime sector in various capacities. For ports and shipping sector particularly, human participation is increasingly pertinent not only for the purpose of operating the ports and shipping assets but also implementing the security measures (Albrecht 2004, Turnbull and Wass, 2007, Lord, 2008 and Manuel, 2011). In this sense, Korolija and Lundberg (2010: 158) briefly relates the human factor as to how the "artifacts, equipments, communications, interactions, systems, working methods and procedures, and other processes involving people, facilitate human work and – eventually – save lives". The human factor that "plays a significant role in ports and docks" as claimed by Ratnam (1975: 193), not only involves human error that leads to accidents in the port (Fabiano, et al, 2010: 980-981) but also takes into account of workload and attitudes of the workers in the port related activities (Ratnam, 1975: 193).

In relation to security involving the port workers, the perception is that ISPS has increased the workload of shore-based as well as sea-going staff. A study conducted by Burmester (2005) based on the experience of some European countries found the evidence of this. In Port Klang's situation, the responses from the port workers suggest a similar outcome:

One member of a group of port labourers described the impact as follows:

> When we were imparted with the ISPS we have to learn about security, we have to do the security, we have to safeguard the safety and security; all these are problem for us. Things that we never involve we have to do it. Initially we complained. We protested. Why we should do this, in actual fact it is the responsibility of the port police. It became a burden to us (Interview Code: 24).

One worker in another group expressed a similar view:

> The disadvantage is work pressure. It caused additional work. When we say about security, we are always in alert. Last time it was more relax but now the awareness has increased (Interview Code: 22).

Other problems emerged in tandem with the ISPS Code. Part A, Section 18, sets out the stringent training requirements:

> (i) *The port facility security officer and appropriate port facility security personnel shall have knowledge and have received training, taking into account the guidance given in Part B of this Code.*
>
> (ii) *Port facility personnel having specific security duties shall understand their duties and responsibilities for port facility security, as described in the port facility security plan, and shall have sufficient knowledge and ability to perform their assigned duties, taking into account the guidance given in part B of this Code.*
>
> (iii) *To ensure the effective implementation of the port facility security plan, drills shall be carried out at appropriate intervals, taking into account the types of operation of the port facility, port facility personnel changes, the type of ship the port facility is serving and other relevant circumstances, taking into accounts guidance given in part B of this Code.*
>
> (iv) *The port facility security officer shall ensure the effective coordination and implementation of the port facility security plan by participating in exercises at appropriate intervals, taking into account the guidance given in part B of this Code* (ISPS Code, 2003 : 23).

The DA observed that people who are involved in implementation of the above need to be updated regularly in terms of security awareness and knowledge. One respondent from the Marine Department gave evidence that "when the time comes, they [those on the ground] become very weak and reduce the awareness. When we conduct exercise then they are alert again. When it is normal situation, the awareness is very less. We take for granted because we are very safe and any kind of terrorism is rarely happens here" (Interview Code: 08).

To run the required training and drill as part of its operational duties, the Marine Department seeks financial support from the Federal government. The level of the financial allocation does not allow for the size of Port Klang, the number of facilities that need to be audited and the training that has to be given (Appendix VI provides a complete list of all facilities under the purview of the Marine Department). According to a key ISPS official in the Marine Department, the allocation was only RM300,000 (USD97,000) far less from what was actually needed (Interview Code: 09).

The US-led Megaport Initiative is also not exempt from manpower problems despite the fact that it is equipment based. A group interview of port workers revealed that they too faced hurdles. As one worker explained:

> They [port operator] introduced scanning machine. But do you know how difficult it is to go through the scanning machine. You can see on the bridge. It is very small and we have to struggle to adjust. But for us, it is very cumbersome and caused uneasiness. There was accident before hitting the scanning machine. We complain to our committee. There are cases we avoid the scanning machine and not to drive through (Interview Code: 22).

In addition to this, requirement for all container drivers to drive through the RPM created a difficult problem for them. As described in the previous chapter, the equipment, placed in a narrow bridge between the container wharf and container yard, would occasionally cause accidents if the driver is not careful enough while driving through. In the event of an accident, the port penalises the driver for negligence. Consequently there appeared to be a tendency among some of the drivers to avoid RPM. Although the RMC could detect the number of prime movers and the driver who avoids the RPM, the effect is that this limits monitoring 100 percent of the container movement. Hence, a criticism can be made that to some extent the system encourages a rather lax attitude towards security in the host country despite the intention is to enhance security.

8.3.1 **Manpower issues**

The security arrangements in Port Klang described thus far reflected the fact that technological investment and port police requirements were passed down to terminal operators in which they shouldered some share of cost elements in their port operation. A part of the context here is the manpower requirement for government and port administration arising from the introduction of the ISPS regime.

Away from the waterfront, at the institutional level, when the Marine Department took on the role of DA in 2003, one hurdle was that there was no dedicated departmental unit or section. The resulting problems were identified by one Marine Department respondent:

> Firstly, we are not prepared because it was new. And then we don't have a dedicated unit to look into port issues. We have the Ports Unit, but it deals more of barter trade issues. It does not involve big ports. So the Marine Department does not have connection with big ports like Westport, Northport, PTP and Penang. We did not have any [contact] with them. Even if it has, it only involves in terms of seminar occasionally, but in terms of security we don't have any with them. So that is our challenge to get a relationship between the Marine Department and ports because before this we don't have any with big ports. Another challenge is we do not have specific officers to handle this security matters. Because all officers have their own duties in their respective units (Interview Code: 09).

The Ports Units referred to by the respondent of the Marine Department in the above context essentially takes charge of the barter trading activities and minor ports that come under the purview of the Marine Department. This is different from the Ports Unit of the MOT as explained in Chapter Seven. Hence the limited capacity of the Ports Unit of Marine Department, that has no direct control of the Federal ports, created difficulties for it to establish security matters at Federal ports at the early stage of ISPS Code implementation.

The requirements of the international regime imposed a burden on the PKA as well. The national Act A1316 assigned the port authority as the MTSO for taking charge of areas beyond port/ship interface. As the appointment by the Marine Department is of a named individual this has obviously caused some anxiety to the PKA security officer. As explained in the previous chapter, any breach of responsibility would result in a heavy financial penalty for the person concerned.

With regard to staffing needs were confirmed by an official of the Marine Department. The respondent asserted:

> We don't have a dedicate unit to look into port issues... we do not have specific officers to handle this security matters because all officers have their own duties in their respective units. Like my self, I was handling the ISM Code [International Management Code for the Safe Operations of Ships] last time. So we concentrate on our duties. When this new Code [ISPS] came into force, we need to have officers to take charge for its implementation. That is why in the initial period we have only myself and few other officers involved to set up the ISPS Code in Malaysia. During that time I was doing the ISM, but I was seconded to do the ISPS...these are the main problems faced by the Marine Department. (Interview Code: 09)

For the government agency, establishing a new unit and fulfilling the manpower requirement incurred cost in terms of salary and other bureaucratic needs. Similarly, the PKA faced a shortage of personnel in view of its increased responsibilities under the ISPS requirement. This shortage was a reason why the PKA came to depend upon the terminal operators to manage and maintain the security forces in the port. (See table 6.5 for terminals port police strength). To this end, one respondent from the PKA asserted:

> I am relying more on terminal operator. I don't have patrolling boat. I don't have the personnel. If I want to do the inspection, I rely on them. If they stop any vessels at the anchorage area, I need to go and need to get the logistical support from the terminal operator, either boat or personnel (Interview Code: 17).

The scale of the problem was described by a senior PKA official responsible for security:

> The only problem we [PKA] find is shortage of personnel. We need to recruit more personnel and train them as well. We are recruiting more security personnel now within the port authority itself to work together with the terminal operators. We are also the Duly Authorised Officers (DAO) who has been recognised by the Marine Department as DA. We have six officers, who have been given DAO powers. That means we can go on board the ship directly but having said that we are still lacking people for the first level of checking. Not so much on implementing the physical security arrangement, but more on the ship's part where we need to do the vetting of the ship…right now our staff is over worked. Of course we need to address this. This is the part we are lacking now (Interview Code: 16).

The CSI did not entail additional government staff as the US used its own officials in Port Klang but this was not the case with the Megaport initiative which, like the ISPS Code, required additional resources as one of the RMC officials explained:

> We put up additional man power. Even though it is new equipment, we have to put up our own team as well. To run Megaport in Port Klang we need thirty-two rank and file officers. And then we need about eight supervising officers. That will come about forty for Megaport Initiative. That will be our cost. We haven't got the full number. Our department has given twenty-two officers. But the Public Service Department has not approved the additional staff. This is a cost for the government (Interview Code: 10).

8.3.2 **Loopholes in security**

The following discusses the loopholes identified in security from the attitudinal and the practical dimensions.

8.3.2.1 **Port Klang**

Although the study found that the system of security was reasonably strong in Port Klang before 9/11, security awareness seemed to be more obvious in the post 9/11 era. One operator respondent stated:

> There are lot of difference in pre-9/11 and post 9/11 in the sense that of course people are more aware of security implementation and why security is more important. Pre-9/11 people were very relaxed. Even the police maybe relaxed during that time. If they do make mistake we just tell them don't do it. We can sometimes drive through. Although things are being checked, everybody was relaxed but then after the implementation, now there are two bodies checking on it. Of course we also started implementing so many strict measures (interview Code: 23).

Similarly, one senior Customs respondent said:

> I believe the whole of port communities at least they are better in terms of awareness on cargo security. I think definitely there is improvement. They begin to realise the importance of cargo security. Not just Customs even those players in the port. So there is a difference between before and after 9/11 in terms of security awareness. Now we are talking about cargo security more often as compared to before 9/11 (Interview Code: 10).

In a wider dimension of the Port Klang, a senior PKA interviewee who was with the organisation for more than twenty years provided examples of stricter security:

> Previously we were screening people who are coming in, but after the ISPS, it is a bit more thorough in the sense that they open up their car boots. Previously they allowed groups just coming into the port, go and visit the port but now all these special screening is being done. You require a special permission and we don't go onboard of the ship for ship visit. Previously when students came, we used to allow them. But now all these things are very restrictive. We simply not allow any civilian to go into the port…Previously ship chandlers can come in and deliver the provisions for the ship as long as they have gate pass, we let them in, but now stringent check. As soon as he comes, we open up the doors and check what they are taking into the port. So access control has been tightened up and of course more patrols around the wharf area to ensure no unauthorised personnel [around] (Interview Code: 15).

Even the terminal operators claimed that they monitor the human and vehicle access through port pass for security enhancement.

Against this however, the DA believed that the awareness level in port was sometimes not sufficiently strong. This may relate to the findings reported in the preceding chapter that terrorism is not seen as a serious risk in the Port Klang's water. Therefore a tendency to be lax may exist among port workers including security officials (Interview Code: 08).

From the port workers' perspective, the workers argued that there are many accidents and theft cases in the port originating from outsiders and foreigners which prompted the question "why did the security officers not check them?" One member of the group mentioned:

> The haulier drivers are from outside. You can see in the terminal there are lot of foreigners here who do not have any driving licence. What we have seen, normally for those drivers it is very easy for them to enter and exit the port. They don't need any pass. Even for us, they will only check thoroughly when there is a case. If not, the security is not as tight as it should be. Even motorbike can get stolen in the port. How could it happen? How can they say the security is very good? Even not all cars exiting the gate will be checked and opened their bonnets (Interview Code: 22).

The Head of Freight Forwarding Association also had criticisms:

> Today if I drive into our port, I can just go like that without my pass. I just raise my hand and go in… But now [his observation] there is no proper control of security. Today you ask the Port Klang how many people are entering they cannot tell. Last year we went to see the GM [General Manager] of the PKA to do some investigation on security on dangerous goods [DG]. We just went in by raising our hands. We went to DG warehouse. We went there but nobody stopped us. Nobody came around. There is no security guard or any staff. We went and see the dangerous goods warehouse, nobody cares. If we were to take something and put it there, what will happen then? Who ever comes in must have proper pass. Irrespective whether you are GM or port authority, there must be a way of recording, especially in the dangerous goods area. How you secure the Port Klang that counts the most. The authority should put stricter rules, then there will be no problem (Interview Code: 26).

Those two different view points suggest that, at one hand, the government and port operators claimed that the port is well secured with stricter security measures but on

the other hand the port workers and users felt that there are some weaknesses in the system. Despite the practical aspect of port security as a whole was strong, the weaknesses described in this context can be connected to attitudinal problem from certain number of enforcement officials. As noted earlier, the security awareness was generally obvious in post 9/11 period, however considering the danger of terrorism is not seen as intimidating for the port as agreed by one of the senior officials of the Marine Department, such perception could probably led to certain level of shortcomings in the actual practise of security measures.

8.3.2.2 **Porous borders**

However good the checks may or may not be within the Port Klang itself, the problem of security here cannot be isolated from the wider security context. Malaysian maritime waters are still porous, with piracy and other illicit activities a significant threat.

One sign of this is the issue of human smuggling and human trafficking which took a centre stage as one of the crimes in Malaysian water in 2011. There are no reported cases of these illicit activities affecting the Port Klang directly, but the crimes had drawn international attention and affected Australia to a greater extent since Malaysia has been treated as a transit point. According to the Anti-human Trafficking in Persons and Anti-Smuggling of Migrants Council, a total of 416 cases and 591 arrests were registered from 2008 to 2011 (The Star Online, 21 January 2012). For the first eight months of 2011 alone (January to August) a total of 136 people, including eight Malaysians were rescued in 53 similar cases (The Star Online, 30 September). The problem primarily originated from economically poor countries like Indonesia, the Philippines, Cambodia, Vietnam and Myanmar and war torn countries such as Sri Lanka and Afghanistan (Stanslas, 2010: 1).

Seaborne human trafficking is perceived to be a complex maritime challenge in Malaysia. There are fears that transnational criminal syndicates could be used for terrorism using trawlers or ships loaded with ammunition (Stanslas, 2010: 1-4). Hence the United States Department of State retained Malaysia in Tier 2 Watch List status in the 2011 Trafficking in Persons report. Tier 2 includes countries that do not fully comply with the US Trafficking Victims Protection Act 2000 minimum standard but

are making significant efforts to eliminate trafficking in persons (The Star Online, 26 August 2011).

Since the matter was considered serious, the Malaysian Prime Minister made an agreement in principle with the Australian Prime Minister on 7 May 2011 to trade asylum-seekers under which 800 people who tried to get Australia by boat would be taken to Malaysia and in return Australia would take 4,000 genuine refugees from Malaysia over the next four years (The Star Online, 8 May 2011). An official agreement on this issue was finally signed by the Malaysian and Australian governments on 25 July 2011 (The Star Online, 25 July 2011). However the deal was not fully welcome by the Australian Parliament as the existing loopholes would be exploited by smugglers for more crimes (The Malaysian Insider, 1 August 2011). Therefore, the measure was eventually aborted on 13 October 2011, mainly because the ruling Australian government did not have the numbers to change migration laws to allow the refugee swap (The Star Online, 13 October 2011).

From the Malaysian policy perspective, such a measure is regarded vital to restrict any exploitation of Malaysian waters. This is because, as one respondent stressed, "human smugglers are also involved in the transnational crimes. That means [it leads to] smuggling of weapons, smuggling of people, drugs, and contrabands" (Interview Code: 14). If this problem goes unchecked, the maritime sector could potentially affect the national security in many ways. A senior security official of a terminal operator related a practical incident with illegal immigrants that had a direct connection with this issue:

> So far the illegal immigrants have certain landing points in the coastal areas. They do not choose Port Klang because they know the security is so tight. So they dare not come in this area. But we have a case, I think last year [2009] or the year before there was a boat full of illegal immigrants over loaded, going back to Ramadan festival. It sank just out side around two kilometres from here. We reacted very fast. We saved lot of them but twelve of them died. It was a major crisis but we reacted very fast. Their landing point is somewhere behind the Island. So they are taking and going [from there]. It is not a threat to the port. But illegal immigrants can be threat to a port (Interview Code: 23).

8.3.2.3 **Problem of small boats**

The issue of small boats particularly barter trade boats is a matter of concern and posts challenges to port security in many respects. As stated earlier, a survey in 2008 indicated there were about 2,000 barter trade vessels plying in the Malaysian waters. In a detailed account, statistics from the Marine Department and various port authorities from 2000 to 2009 registered 206,300 barter trade movements between Peninsular Malaysia and Sumatra Island, originating mainly from Port Klang, Malacca, Muar and Batu Pahat ports to jetties and ports in Sumatra (Shahryari and Arshad, 2011: 6) Even in the east coast of Peninsular Malaysia where Kuantan Port is located, where barter trade is considered particularly small, this was seen as a threat. The head of security commented:

> This [small vessel] is one of the problems that we do not have equipment to monitor the movement of the vessels. We only have system for the big vessel, 500 GT and above. We have the AIS receiver. We can detect any vessel 500 GT and above. There is a system for this. But those non compliance, small vessel we cannot see [through this system]. The smaller vessel is the threat because they use the smaller boat to ram into the big vessel. They can come strait into your ship or come into the berth without being detected. This is our problem. (Interview Code:18)

In the case of Port Klang, the PKA is apparently aware of this problem but according to one senior security official, the issue is not resolved due to bureaucratic impediments:

> I'm very serious about it [barter trade vessels]. We already told the Marine Department about the seriousness. Currently they don't even have VHF on board. So we told them to start off with VHF first, because they are coming right into the town in Southport. Because of this danger, we have already written to Marine Department. I had spoken to the Director General to do something about it...He understands the situation but don't know how long it takes (interview Code: 15).

The movement of barter trade vessels in addition to the heavy volume of merchant vessel traffic unequivocally is a high risk for the SOM. Responses elicited from the stakeholders, especially the policy makers and port authority are the reflection of this potential risk for both the SOM and Port Klang. There were twenty-seven accident cases registered from 2000 to 2010 (Shahryari and Arshad 2011: 6) but it cannot be

denied that the element of security risk is inherently embedded within the movement of transit traffic. As pointed out by Shahryari and Arshad (2011: 6) that "any incident or accident however minor will not only carry the possibility of disrupting the flow of traffic, it would also adversely affect the rich ecosystem of the SOM and its role and in the life support system of the region". In relation to this, Yasin's (2007:15) argument as stated in Chapter Three is worth repeating at this point, that any damages to the ecosystem could possibly disrupt the livelihoods of coastal inhabitants. This would eventually force them to resort to maritime crime for survival.

8.3.2.4 **Corruption and political intervention**

There is an argument that executing preventive or mitigating measures at sea, as in the case of attack against a ship, yacht or boat or even port facilities in this respect, is quite a challenging task and therefore requires more effort than a comparable action ashore (Zec, Francic and Hlaca, 2010: 47). Similarly, port security in Malaysian ports generally faces a daunting task in respect of illegal fishing, piracy/armed robbery and illegal immigrants. The statistics of various offences handled by the MMEA as shown in Table 7.1 in Chapter Seven are proven a strong testimony that maritime security that has a close connection to port security needs considerable effort from all parties. However there is a strong accusation that corruption and abuse of power have permeated in many law enforcement agencies thus introducing another layer of impediment for effective enforcement.

According to Bakashmar (2008: 483), one of the related agencies is the RMP Force in which the Marine Police is also part of the organisation. The finding of the Royal Commission initiated by the former Prime Minister of Malaysia Tun Abdullah Badawi shows that "the entire police force is inefficient and corrupt". Consequently the pervasive corruption within the Malaysian police force is a significant problem that weakens the authorities' capabilities to combat crime. In the same vein, other enforcement agencies are no exception in practicing bribery hence bringing a damaging effect in the quality of service as oppose to what was envisaged by the government and the public.[39] The arrest of more than sixty Customs officers in April

[39] The 2010 Transparency International corruption perceptions index reveals that Malaysia holds 56th position out of 178 nations with the score of 4.4 on a scale from 10 (very clean) to 0 (highly corrupt). In 2011, Malaysia scored 4.3 and declined further to 60th position (The Star online, 1 December 2011).

2011 by the Malaysian Anti-Corruption Commission involving millions of Malaysian Ringgit in briberies is plausible evidence demonstrating the weakness of the enforcement agencies (The Star online, 2 April 2011).

Another aspect is political interference influencing the release of the captured criminals where in many cases the enforcement agencies are obliged to follow what has been directed from the top authorities. For example one respondent who is responsible for port security in the Johor Port Authority asserted:

> Firstly we have to think from top down. There is still political interference. We do enforcement at the lower level, but the people at top if they overrule our duties, then what else can we do? So this has to overcome in total. Normally only when there is any incident then the action will be taken… in fact the security decision is done by the politician, top down approach. We allocate security areas and gazetted it. When people enter and we catch, then there are political interferences, asking us to release this people. So how can we do our job? This is one of the problems in the implementation part (Interview Code: 19).

Thus, effective security measures are clearly hampered by such interventions.

8.4 **Conclusion**

This chapter examines various problems and challenges for port security in Port Klang as well as other Malaysian ports. Malaysia takes every effort in complying with the international convention of the ISPS Code as mandated by the IMO. Nonetheless the implementation at the national level was not as smooth as it was expected despite the fact port security measures had long been established before 9/11. The field trip interviews for this study revealed that in addition to cost being an issue for the terminal operators, the regime created an extra burden at several levels, from port workers to port officials and civil servants particularly the need for extra workforce and additional work. The issue of cost element and resistance to following the international requirements seen in this case also appeared in other developing countries, as shown in different studies. However, Port Klang has managed those problems reasonably effectively and terminal operators proved able to absorb a certain amount of security expenditure.

For a nation that strives to be a developed nation by 2020, such a result is certainly not promising or encouraging in international context.

The application of the unilateral measures by the US to all its trading partners has led to increased costs for the port, including Malaysia. The Malaysian government was obliged to establish a special unit, with manpower and monetary support to materialise the policy decisions at the practical level. Furthermore, for the port users and labourers, it appears that the US regimes have unequivocally burdened them, leading to accusations that the US has pushed its problem towards others. Hence, the discernable fact is that the implementation of various security regimes has not come in free but incurred financial burden for users covertly hidden within the system. As far as private stakeholders are concerned, whatever cost come along in the business transaction, the costs will be transferred to end users ultimately. Although some extra burden is shown in economic cost as well as the workload and attitudinal problems in certain security practices, the crux of the matter is, security has not been comprised for the port and maritime sector as it is considered highly essential as required by the national jurisdiction as well as for international need. Looking in a holistic perspective of the Malaysian port security system, in the eagerness for not compromising security, this study found that there are still loopholes and other weaknesses that demand considerable attention from the government and other stakeholders. This is chiefly drawn from the fact that Malaysian maritime border is still porous that led to all kinds of illicit activities continue to flourish. In this respect, matters relating to human smuggling and human trafficking as well as problems of small boats need additional attention. For the international community, this raises question as to how the offences committed against ship and persons on board can be resolved effectively. Even within the port sector, there appeared to be loopholes in the existing system as claimed by port workers. The element of graft within the enforcement agencies is another issue that weakens the government machinery in producing effective security measures. In spite of those practical problems and challenges in the management of port security in the Malaysian context, the chapter highlighted the fact that security is considered a vital element in the maritime sector, therefore strong efforts were made not to compromise the required security, as mandated by the international organisations and the US.

CHAPTER NINE

CONCLUSION

The core of the thesis is port security measures in the pre and post 9/11 eras in a developing country, Malaysia. A central issue here was the contention in much of the literature that compliance with the international regulatory regime affecting ports introduced in response to 9/11 necessarily proved problematic for developing countries. By answering the key question of "how has the event of 9/11 affected port governance", focussing on the case of Port Klang in particular and the Malaysian port system in general, the study aimed to establish whether this assumption held true in this case. Subsidiary aims were to identify changes or otherwise in perception of threat as a consequence of 9/11; to examine security aspects and practices before and after 9/11; to look at changes in the institutional and legal arrangements for protecting the port and to consider what were the implications and challenges of implementing various initiatives in safeguarding the port.

It has been shown in the early part of this study that the terrorist attacks on 11th September 2001, altered the maritime domain by establishing a "before" and "after" dividing line. The fundamental basis of this division was that 9/11 increased the perception of the port and shipping sector as 'soft belly' potential targets taking into account their openness and vulnerabilities.

The result was a raft of new compulsory security requirements for ports, some established by the IMO, some demanded of its trading partners by the US, others laid down by regional organisations. As a consequence, port security now had a dual dimension. Governments, port owners and operators faced not only the conventional and routine need to secure a port from any kinds of unlawful acts that might jeopardise operations but also the need to fulfil international security requirements which also include some of the unilateral measures of the US, whether willingly or unwillingly and whether their waters were prone to security threats or not. The latter seemingly raised particular issues for developing countries because of potential costs and the practical challenges posed by implementation. The general presumption was that the developing countries found it difficult to respond to new port security requirements in the post 9/11 period. However, the particular case studied here throws

doubt on this assumption. Despite elements of cost and other economic implications, the Malaysian port system, in particular Port Klang, in view of their advanced security arrangements much earlier than 9/11, managed reasonably well in handling the required measures. To a certain extent, the pre-independence threats, particularly communist terrorism (land-based terrorism) that posed considerable challenges to national security, provided a fundamental basis for stricter port security systems. These were then maintained, improved and subsequently intertwined with other measures required in the post 9/11 period.

This study reached this conclusion by endeavouring to analyse how the event of 9/11 affected port governance, corresponding to the above dualism, through a case study approach. Focusing on Port Klang - one of the fastest growing ports among developing economies - it examined how this resulted in a change of attitude towards security as well as in the behaviour or practices and in institutional arrangements. While the research was essentially based on Port Klang, its findings have links to Malaysian ports in general since the international measures required a national level of compliance. For this purpose, for collecting primary source material, interviews were conducted with relevant players representing different segments of government and private agencies. These were then supplemented with a range of other sources such as government reports, legal instruments, newsletters and of course scholarly publications to substantiate the findings.

Generally, as a complex matter, the study found that port security has been viewed in different contexts. There was paucity of literature in relation to port security before 9/11 as highlighted in the introductory chapter. The overall approach during the period however was very much related to theft and pilferage, as security was regarded a subset of safety in port. Despite a record of terrorism and piracy/armed robbery in the Southeast Asia region where Malaysia is located, these threats were not perceived as particularly threatening or challenging to port operators or to policy makers. Viewed from different spatial levels; international, supra-national and national that formed a basic model for this study, port security regimes before 9/11 were apparently 'localised'. In the 1980s and the 1990s key attention was largely directed to port reformation and privatisation. The danger of maritime terrorism was possibly underestimated during this period, despite some measures against it, but seemingly a

risk-based approach was not a core issue in comparison to the measures initiated post 9/11.

However the aftermath of 9/11 altered the nature of port security. The perception of an element of threat to ports and shipping grew. This was on the premise that the scale of atrocities landside might be shifted to the maritime sphere because of its inherent vulnerabilities. Hence a wide range of policy measures were introduced at various spatial levels across the globe. The US, in consequence of its victimisation in the 9/11 attacks, especially took the lead and played a crucial role in influencing international organizations, in particular the IMO, to introduce harsh measures. This gave birth to a number of new regulatory regimes, notably the ISPS Code, at international level. The US also introduced a raft of unilateral measures, but having a global effect. Many of those measures were imposed on its trading partners, with the effect of pushing its border beyond its legitimate water. Such regimes had an element of compulsion, since those who refused to comply with the US requirements would be subjected to trade restrictions. It also had a power relation dimension. In conforming to US requirements, Malaysia demonstrated its continued commitment to the success of an amicable foreign policy with the US.

9/11 not only altered the physical landscape of ports but changed attitudes and practices affecting security in many respects. This was noticeable in terms of the speed and number of regimes introduced at different levels and the obligation to put these into practice, despite the fact that such measures faced considerable criticism from developing economies in relation to high cost and effectiveness. The ISPS case is the best example in that it was passed in fifteen months. It has been suggested that such a situation engendered security regimes implemented at different scales in different parts of the world based on each state's own interpretation and that these regimes reflected a country's location, geographical surrounding and its national legislative requirement. It has therefore been argued that the "one size fits all approach" as espoused by the IMO was not truly applicable because of this disparity. The Port Klang case study tested this claim by highlighting the Malaysian government approach.

Since the government considered Malaysia as a maritime nation, considerable importance was given to sea trade for the national economy. This was reflected

especially in port development in which the government had striven to develop all Federal ports, in particular through the Five Year Development Plan. In this respect, the government took the initiative in privatising all Federal ports, starting off with Port Klang in 1986. The Port Klang was identified as the 'first' port in view of its setting and significant contribution to national economy. This progress had a retrospective connection to the period of British rule when Port Klang had been earmarked as a strategic port for serving the port cities of Klang and Kuala Lumpur as well as for international purposes. Its impressive growth over time encouraged the government subsequently to declare it as the national load centre and regional transhipment hub.

The expansion of Port Klang confirmed its role as a main gateway for both domestic and international trade, noticeable in Port Klang's progressive growth from its early development until the present moment (2011). The study highlighted the fact that the Port Klang was not an open port. It was heavily protected under the Protected Areas and Protected Places Act 1959, a legacy of Malaysia's earlier colonial regime that had introduced stringent rules. The Act basically defined all key ports as an essential service and therefore imposed restrictions prohibiting any unauthorized person from being present in the protected areas. This preventive law was primarily introduced to safeguard ports from any form of subversive attack or sabotage, with communist terrorism, seen as the main threat during the period of British colonial rule. From thereon the measure was continued to preserve the sanctity of key ports. It is significant that when the government privatised the port terminals, the authority (PKA) did not relinquish its responsibility for taking charge of security matters. The government had shown an extensive interest in safeguarding the port, although the private entities operated it on a commercial basis.

Returning to the key question of how 9/11 affected the port governance, it is clear that even before this the Malaysian government had in fact established very advanced protective measures in all country's key ports. Such a proactive approach provided a relatively good foundation for the implementation of the ISPS Code owing to the fact that many of the basic requirements were already in place. Furthermore, in the interest of national security, in Malaysia the application of the ISPS Code was expanded beyond the port/ship interface, covering a bigger scope of port parameter.

In relation to the question of the perceived threats before and after 9/11, the study found that the security situation of Port Klang was similar to other ports in the world where thefts and pilferages were the common crimes. However, the element of terrorism which created much anxiety in the West, especially for the US, was shown not to be an issue at all for Port Klang or the Malaysian maritime sector in general. Nonetheless other illicit activities such as piracy/armed robbery, smuggling of weapons, humans and contraband are continuously taking place in SOM in which the Port Klang is located in the same vicinity. To overcome such menaces, several security measures were put in place. On the question of the scope of security measures before and after 9/11, the study found that the Malaysian government practiced advanced and strict measures even before the 9/11 incident. It was argued that this was a significant feature having a considerable impact on subsequent developments in Malaysian port security.

As such, as noted earlier, Port Klang was heavily protected under the Protected Areas and Protected Places Act 1959. Further, apart from conforming to the ISPS Code as mandated by the IMO, the Malaysian government demonstrated a strong commitment to several other measures, in particular the unilateral measures of the US in post 9/11 era, in order to maintain the power-play relationship with the US. Hence, in the light of the significance of US-Malaysian trade, as well as supporting the US in fighting against the terrorism in the Southeast Asia region, Malaysia agreed to comply with and brought into force the CSI and the Megaport Initiative. Since Malaysia-US relations had been established from the 1970s covering a range of endeavours, the Malaysian government considered those security measures important for the benefit of the nation not only from an economic point of view, but also from a socio-political dimension. Malaysia also proved its commitment by establishing STA in a local context, in an attempt to enhance the non-proliferation of WMD.

All these efforts were made on the basis of 'rejecting dominance, embracing engagement' with the US. It is noteworthy however, that these agreed measures had cost and other consequences. Looking at this from a critical standpoint, by so extensively adopting the US measures in addition to complying with international

measures, places Malaysia in the zone of over-compliance with port security measures as a whole.

In relation to institutional and legal arrangements, the study pointed out clearly that in view of national interest, the government considered security as a vital element for economic as well as socio-political survival. Thus, key agencies such as the MOT, NCS, Marine Department, Customs and MMEA have been playing fundamental roles at various capacities in terms of policy making and implementation. Concurrently, the terminal operators as private entities, though they run the port with a commercial purpose, are obliged to adhere to polices directed towards them. Essentially, the establishment of different agencies was to ensure that all legal instruments and polices made by the government on the aspect of port security are realised as effectively as possible for the interest of national security and socio-political development.

On the question concerning the implications and financial consequences of implementing security measures, the study found that notwithstanding the fact that an advanced system of port security was not new to Port Klang or to other Malaysian ports, there was some element of additional cost resulting from the provision of specific units and training for the government in implementing the ISPS Code. Inadequate personnel were another issue at the start of implementation. However, implementation cost was generally not a major issue in the Malaysian case as compared to the experience of other developing countries highlighted in studies like UNCTAD (2007), Azuh (2007) and Ng and Gujar (2008). The Malaysian port systems had managed well in this respect.

While the study suggests that the cost was not a major factor for Malaysia, there were some challenges relating to ISPS Code implementation that should be noted in this context. These included reluctance or some form of resistance from the workers' perspective in the early stages. There was evidence also of some form of dissatisfaction or unhappiness about the US measures, not only from the user's perspective but also from some policy makers. This type of reaction indicates that attitudinally not all stakeholders accepted the security changes brought by 9/11. However, this resistance appeared to be very minimal and temporary and did not hamper at all the practical aspects of the realisation of the policy measures decided by

the government. In other words, in spite of some resistance which seemingly was personal rather than general, the required port security measures have not been compromised.

Another weakness revealed in relation to the implementation of the ISPS Code was that, notwithstanding that the Code was assigned to the Marine Department for the purpose of enforcement, the sectoral enforcement by the MMEA, Marine Police and Customs, Immigration and others occasionally produced ineffective results. This was mainly because, despite all of them wearing government uniforms, their focus was very narrow and self-centred. Such a bewildering combination of enforcement agencies made the coordination task arduous and complex. The situation also potentially hampered a quick response during any untoward incidents. These agencies were said to be unwilling or unable to exchange intelligence or sensitive sources of information among them effectively, due an element of 'professional jealousy' (interview Code: 13). Furthermore in sectoral management, a government agency was independent in managing its administration, operation, budget allocation and assets within its given area of responsibility (Kasmin, 2009: 33). The sectoral institutional arrangements to some extent therefore contributed to a lack of reciprocal coordination.

On the issue of a regional perspective, ASEAN's principal of sovereignty that binds each member state adversely affected the effort for extra-regional cooperation, promoted particularly by the US, to further strengthen maritime security, with a connection to the port sector. Suspicion of the real motives for the US presence and also fear of Islamic fundamentalist retaliation were among the perceived obstacles for establishing robust security measures. Generally, it has been argued, that in an 'information age' security lies not in secrecy but transparency (Goward, 2008: 510). In ASEAN's case however, the notion of sovereignty did not allow for such transparency, but contributed to some element of cautious feeling within the member states when it came to any external influence or interference.

It should be noted that according to Zec, Francic and Hlaca (2010: 47), "in some cases, implementing effective security measures may be even more difficult or requires additional effort due to external influences i.e. that cannot be controlled by responsible authorities". Although in the case of Malaysian port governance,

implementing the security requirements in total was not a major problem, the research identified a number of internal and external loopholes that could potentially affect the overall effectiveness of the implemented security system.

In this connection, the study found that although Malaysian waters were perceived not to be a significant source of security threat, the rising number of other maritime crimes increasingly reminded the policy makers that there are others aspects to which the government needed to pay attention, apart from confining this to the port sector alone. The port sector was part of a larger component of the maritime sector and the other ungoverned water space, with many remote islands which could possibly provide a safe haven for nurturing various forms of illicit activities. Even so, despite the fact that terrorism was perceived to be non-existent particularly in Port Klang's water, in view of its close proximity to the SOM, other maritime crimes especially human trafficking and those associated with the un-regulated entry of small boats, were still a threat.

The study revealed certain shortcomings in the system such as porous borders and problem of small boats that might be anticipated and which the Malaysian government may in future address. Remedies could include strengthening the cooperative mechanism with regional states, coordinated enforcing system within the enforcing agencies by establishing maritime domain awareness beyond port (Goward, 2008: 521-524 and Rahman, 2010: 204) and effective sharing of intelligence.

Overall, the research provides a picture of how complicated and complex the port security system. Ng and Vaggelas (2012: 676) paraphrased this as "port spaghetti" which in other words describes how closely the port system is intertwined or rather over loaded with host of security measures imposed by various parties at different levels. As compared to pre-9/11 period, the post 9/11 undoubtedly created a challenging scenario which required a high level of governance and responsibility, thought by some commentators to be particularly difficult for developing nations. It has been pointed out in the literature review that studies like OECD (2003), UNCTAD (2007) and Azuh (2007) considered that the post 9/11 security measures especially the ISPS Code caused a burden to developing countries. In relation to this, Ng and Gujar (2008: 275) arrived to a conclusion in the Asian perspective that "a number of them especially the developing countries and regions, found it difficult to

fully comply with the mandatory requirements, mainly due to the lack of information sharing, technical know-how, regional co-operation and the low priority of port security issue on the political agenda, not helped by the influence of various local and regional interest which could significantly jeopardise the effectiveness of implementation". However, the particular case of Port Klang and Malaysian port system proved otherwise. The study discovered that Malaysia stands as an exception to this generalisation partly on the ground that for historical reasons it had introduced quite sophisticated port security measures earlier than 9/11. Apart from this, as one of the 'advanced' developing nations, Malaysia was in a position to demonstrate to the international community its seriousness in conducting international trade in a safe environment. Since a port was seen as an essential service, its sanctity was well guarded from land and water based threats. Albeit there were some challenges, implementing the required measures successfully did not appear to be arduous task.

Essentially the study filled a gap by providing a good example of how port governance treated effectively the various security regimes in response to 9/11. Within this scope, the study expanded the knowledge of port security covering the dimension of 'before' and 'after' 9/11. As there is paucity of literature particularly on port security 'before' 9/11, the study therefore added successful policy measures by a developing nation to the body of knowledge. By going into the dimension of post 9/11 period, the study demonstrated how Malaysian ports in general and Port Klang in particular had been able to realise a number of security regimes, serving both national and international interests. To a certain extent, Malaysia's efforts may even be perceived to be over-compliance with port security measures. This was primarily because Malaysia was not only in a position to safeguard its own national interest as required by the national jurisdiction, but being a responsible member of the IMO, Malaysia was also obliged to heed the international call. The nature of Malaysia's foreign policy also dictated acceptance of the unilateral measures of the US in order to sustain a well oriented trade and other arrangements between Malaysia and the US.

Although this is a case study which represents only one developing country, theoretically and empirically the study shed the light that not all developing countries have endured difficulty in realising port security measures even in the post 9/11 period where the measures appeared more complex and demanding. As the only study

to date to focus in detail on the experience of a developing country in implementing the pre and post 9/11 port security regiment, it revealed Malaysia to be a counter-example to assumptions here, warning against generalisation based on insufficient evidence. As such, the study is a testimony to successful policy measures. Malaysia's port governance, particularly for Port Klang proved sufficiently robust to establish good port security governance.

APPENDICES

APPENDIX I

Professor Sarah Palmer
BA (Durham) MA (Indiana)
PhD (London) FRSA FRHistS
Director

GREENWICH MARITIME INSTITUTE

Participant Information Sheet

Research Title: ***Port Security in Developing Countries – Pre and Post 9/11 Terrorist Attacks: A Case Study of Port Klang in Malaysia.***

The main objective of this research is to analyse port security before and after the terrorist attack on 9/11. It appears that this very incident has changed the port sector quite considerably and made a profound impact on the overall maritime domain in a number of respects. Port Klang has been chosen as a case study for an examination of security before and after 11th September 2001.

As there is little published information available on the subject of port security before the 9/11 particularly, interviews will be used as a source of first hand information on the problems and challenges experienced.

The research has been approved by the University of Greenwich Research Ethics Committee. The researcher has also obtained confirmation from the Public Service Department of Malaysia (PSD), who is the employer and provider of his scholarship that he will be conducting the study in capacity of a student. In line with both approvals and in accordance with the UK Data Protection Act 1998, all information gathered from the interviewees will be treated with utmost confidence. The interviewee will not be named in the thesis and they will be able to read it upon request. All collected data, including any audio recordings, will be destroyed upon the completion of the research.

As the interview is conducted through voluntary participation, participants are free to withdraw at anytime before or during the process of interview or refuse to answer any of the questions on their own accord. The information obtained will thereafter be used for this academic project and any publication that is related to this research only. As such there is no commercial or government interest involved in whatsoever pertaining to this research.

The research is supervised by Dr. Minghua Zhao and Professor Sarah Palmer. Below are their contact numbers and emails:

1. Dr. Minghua Zhao Office Tel: 004420 8331 7661. Email: m.zhao@gre.ac.uk
2. Professor Sarah Palmer Office Tel: 004420 8331 7689. Email: S.R.Palmer@gre.ac.uk

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APPENDIX II

PARTICIPANT CONSENT FORM

Title of Research: Port Security in A Developing Country – Pre and Post 9/11 Terrorist Attacks: A Case Study of Port Klang in Malaysia.	
Investigator's name: Periasamy Gunasekaran	
To be completed by the participant	
1. I have read the information sheet about this study	YES/NO
2. I have had an opportunity to ask questions and discuss this study	YES/NO
3. I have received satisfactory answers to all my questions	YES/NO
4. I have received enough information about this study	YES/NO
5. I understand that I am free to withdraw from this study:	
• at any time	YES/NO
• without giving a reason for withdrawing	YES/NO
• without affecting my study or future with the University of Greenwich	YES/NO
6. I agree to take part in this study	YES/NO
7. I agree to be recorded in audio	YES/NO
Signed	Date
Participant's Name in block letters	
Signature of researcher	Date

This Project is Supervised by:

Contact Details (including telephone number):

1. Dr. Minghua Zhao Office Tel: 004420 8331 7661. Email: m.zhao@gre.ac.uk

2. Professor Sarah Palmer Office Tel: 004420 8331 7689. Email: S.R.Palmer@gre.ac.uk

APPENDIX IV

PORT SECURITY MEASURES PRE- 9/11

State/Organisation	Level	Risk			
		Cargo related	Ship related	Port related	Worker/Seafarer related
International Maritime Organization (IMO)	International	A. 897 (20) – Prevention and suppression of the smuggling of drugs, psychotropic substances and precursor chemicals	1. MSC/Cir.443 - Measures to Prevent Unlawful Acts Against Passengers and Crews on Board Ships. (1986) 2. Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA Convention) and 1988 SUA Protocol relating to Fixed Platform Located on the Continental Shelf. 3. MSC/Circ.754 - Passenger ferry security, providing recommendations on security measures for passenger ferries on international voyages shorter than 24 hours & ports. 4. A. 897 (20) – Prevention and suppression of the smuggling of drugs,		1. MSC/Cir.443 2.SUA and Protocol, 1988. 3. MSC/Cir.754 4. MSC/Circ.622/Rev.1 5. MSC/Circ.623/Rev.3

State/Organisation	Level	Risk			
			psychotropic substances and precursor chemicals 5. MSC/Circ.622/Rev.1 – Recommendation to governments for preventing and suppressing piracy and armed robbery against ship. 6. MSC/Circ.623/Rev.3 – Guidance to shipowners and ship operators, shipmasters and crews for preventing and suppressing piracy and armed robbery against ship.		
EU	Supra-national	Trans-European Transport Networks (TEN-T)		Trans-European Transport Networks (TEN-T)	
ASEAN	Supra-national	ASEAN Declaration on Transnational Crime, 1997			
United States (US)	National	1. Merchant Marine Act, 1936 2. Ports and Waterways Safety Act, 1972			
United Kingdom (UK)	National	Aviation and Maritime Security Act, 1990			

APPENDIX V

PORT SECURITY MEASURES POST 9/11

State/Organisation	Level	Risk				
		Cargo related	Ship related	Port related	Worker/Seafarer related	
United States (US)	National	Maritime Transportation Security Act (MTSA) 2002	96 Hour Advance Notification of Arrival	MTSA 2002	Abolition of crew list visa and individual visa requirement	Most national level security initiates around the world are centred on these listed security initiates
		Customs-Trade Partnership Against Terrorism (C-TPAT)	Proliferation Security Initiatives (PSI)		Detained on Board and Guard Service Orders	
		Container Security Initiatives (CSI)			96 Hour Advance Notification of Arrival	
		24 hour Rule				
International Maritime Organization (IMO)	International		1. ISPS Code 2. Protocol to SUA Convention	ISPS Code		
International Labour Organization (ILO)	International				1. International Seafarer Identification card 2. Maritime Labour Convention (MLC)	
World Customs Organization (WCO)		SAFE Framework of Standards to secure and facilitate global trade				
European Union (EU)	Supra-national	Authorized Economic Operator (AEO)	Regulation 725/2004	Regulation 725/2004 Directive 65/2005		

APPENDIX VI

ORGANISATIONAL CHART OF MALAYSIAN PORT SECURITY UNDER THE ISPS CODE

MINISTRY OF TRANSPORT

ISPS CODE SECURITY COMMITTEE

DESIGNATED AUTHORITY

(DIRECTOR OF MARINE)
MARINE DEPARTMENT MALAYSIA

MARINE DEPARTMENT NORTHERN REGION

LANGKAWI PORT OFFICE

1. Star Cruise Jetty Langkawii
2. Jeti Penumpang Kuah

LUMUT PORT OFFICE

3. Lekir Bulk Terminal Lumut
4. Lumut Maritim Terminal
5. Malayan Flour Mill Lumut

PENANG PORT COMMISSION(PPC)

PPC (PENANG)

1. North Butterworth Container Terminal
2. Butterworth Deep Water Wharves
3. Prai Bulk Cargo Terminal
4. Chevron Malaysia Lmtd
5. Esso Bagan Luar
6. Shell Bagan Luar
7. Swettenham Pier

PPC(TELOK EWA)

8. Kedah Cement Jetty
9. Petronas Telok Ewa

MARINE DEPARTMENT CENTRAL REGION

MELAKA PORT OFFICE

1. Petronas Sungai Udang Sdn. Bhd

PORT DICKSON OFFICE

2. CABOT (M) Bhd.
3. ESSO (M) Berhad
4. Shell Refining Company Berhad
5. Syarikat Perak Bumi Rel Sdn. Bhd
6. Jeti Jimah Energy Ventures Sdn Bhd
7. Jeti Penumpang Port Dickson

PORT KLANG AUTHORITY

1. Northport Berhad
2. Kapar Power Station
3. Westport Berhad
4. Pelabuhan Tg. Beruas
5. Star Cruise Terminal

JOHOR PORT AUTHORITY

1. Johor Port Berhad
2. Pel. Tg. Pelepas
3. MMHE Sdn. Bhd.
4. Pel. Tg. Langsat
5. Idemiitsu SM
6. Jeti Tg. Belungkur
7. Tg. Bin Power Plant Coal Unloading Jetty
8. Jeti Penumpang Tanjung Pengelih
9. The Zone Ferry Terminal

MARINE DEPARTMENT EASTERN REGION

KERTEH PORT OFFICE

1. Kerteh Port Sdn. Bhd.
2. **FPSO Bg. Kertas*
3. **FPSO Perintis*
4. **FSO PM 3 – CAA Bunga Raya Oil Field*
5. ** FSO Puteri Dulang*
6. **FSO Puteri Cakrawala*
7. ** FSO Angsi*
8. **FSO Cendor*
9. ** FSO Abu*
10. ** FSO Orkid.*

KEMAMAN PORT AUTHORITY

1. Kemaman Supply Base
2. Eksport Terminal Tanjung Sulong
3. Consortium Pel. Kemaman
4. West Wharves
5. Kemaman Port Liquid Chemical

BINTULU PORT AUTHORITY

1. Bintulu Port Sdn. Bhd
2. SHELL MDS Sdn. Bhd
3. Bintulu Integrated Facility
4. Bintulu Crude Oil Terminal & SBM 1

MARINE DEPARTMENT SARAWAK

KUCHING PORT OFFICE

1. Hexachem Sarawak Port
2. Pelabuhan Pending
3. Pelabuhan Senari
4. CMS Cement Sarawak
5. Senari OGC Jetty

MIRI PORT OFFICE

6. Miri Crude Oil Terminal
7. Miri Port Authority

MARINE DEPARTMENT F.T LABUAN & SOUTH CHINA SEA

1. Asian Supply Base Labuan
2. Labuan Crude Oil Terminal
3. Petronas Menthanol Labuan –plant 1
4. Sabah Flour & Feed Mill Labuan
5. Shell Timur Labuan
6. Antarasteel Mill Labuan
7. New Liberty Wharf
8. Petronas Methanol Labuan-Plant 2
9. **FSO Kikeh*

SABAH PORTS AUTHORITY

1. Pel. Kota Kinabalu
2. Pelabuhan Sepangar Bay Oil Terminal
3. SFI Jeti Sipitang K. K.
4. Cement Industries Sabah K. Kinabalu
5. Sepanggar Bay Container Port
6. Menumbok Ro-Ro Ferry & Passenger Terminal

MARINE DEPARTMENT SABAH

SANDAKAN PORT OFFICE

1. Pelabuhan Sandakan
2. SHELL Timur Sandakan
3. Sg. Mowtas Oil Jetty (SPA IOI Jetty)

TAWAU PORT OFFICE

4. Pelabuhan Tawau
5. Tg Batu Oil Terminal

Berth

KUANTAN PORT AUTHORITY

MTSO = 20
MFSO = 90
**FSO / FPSO TO REPORT TO THE NEAREST MTSO*

SIBU PORT OFFICE
8. Lembaga Pel. Rajang
9. Depoh Pukal Petronas Seduan Sibu
10. Rajang Port Sg. Merah

11. **FSO Caspian Sea*

LAHAD DATU PORT OFFICE
6. Pel. Lahad Datu
7. Kwantas Oil L. Datu
8. Felda Sahabat Jeti
9. Kunak Jeti

APPENDIX VII

Malaysia's Major Export and Import Destinations in 2011
(in billion US Dollars)

Country	Export 2011			Country	Import 2011	
	USD224	Share %			USD185.2	Share %
China	29.3	13.1		China	24.4	13.2
Singapore	28.4	12.7		Singapore	23.7	12.8
Japan	25.7	11.5		Japan	21.1	11.4
US	18.5	8.3		US	17.8	9.6
Thailand	11.4	5.1		Indonesia	11.3	6.1
Hong Kong	10.1	4.5		Thailand	11.1	6.0
India	9.2	4.1		Taiwan	8.7	4.7
Korea	8.3	3.7		Korea	7.4	4.0
Australia	8.1	3.6		Germany	7.0	3.8
Taiwan	7.4	3.3		Hong Kong	4.4	2.4
Others	67.4	30.1		Others	47.9	25.9

Source: Ministry of International Trade and Industry Malaysia (MITI), 2012.
Note: Note: MITI's figure in Ringgit Malaysia was converted into USD with the currency rate: USD 1 = RM 3.1.

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