

A Research on Supply Chain Security in Malaysia

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Abstract— Transportation is an important supply chain driver because products are very dependent on due to currently supply chain activities. In today's economy, organization is working on reducing its bottom line to get its profits up, as top line growth is almost non-existent. In logistics business, one area that can add to your organizations profitability but which is often overlooked is prevention of cargo theft. The need for cargo security is critical to assist the transportation industry in combating the serious increases in cargo crime. Cargo security is not an isolated event; security has to be applied across the value chain, across borders and integrate an ongoing awareness in every single point of interaction with the cargo. Cargo theft represents any stealing from premises or hijacking from the point of origin to the destination. Many companies normally do not report such crimes for several reasons. The security of cargo in the supply chain has become one of the major global security concerns given its recognized vulnerabilities which make cargo possibly the easiest target for criminals. Any supply chain's success is closely linked to the appropriate use of a secured and safe transportation. Many companies have not yet invested in improving security beyond the minimum level due to difficulty in justifying security investments. Companies may not yet see the benefits of enhanced security or unable to make an adequate business case for security implementation. However, supply chain security management is not a black hole and it is believe that secured supply chains do provide a return on investment for transportation and logistics companies.

Keywords— *cargo theft, supply chain security, transportation, cargo security, hijacking*

1. Introduction

In today's economy, every organization is working on reducing its bottom line to get its profits up, as top line growth is almost non-existent. In logistics and supply chain business, one area that can add to your organizations profitability but which is often overlooked is prevention of cargo theft. The need for cargo security is critical to assist the transportation industry in combating the serious increases in cargo crime. Supply chain security is not an isolated event; security has to be applied across the value chain, across borders (countries, departments, competitors,

customers and transportation modes) and integrate an ongoing awareness in every single point of interaction with the cargo. Hence security will only be as secure as the security of all the steps that have been before; that's why it's important to apply it across the value chain. The term, cargo theft represents any stealing from premises or hijacking of cargo moving by trucks, rail cars or ships from the point of origin to the destination. It is considered cargo theft if it is stolen at any point between origin, destination and in between. Many companies normally do not report such crimes for several reasons. They often feel it might damage their reputation, increase their insurance rates, or otherwise become an embarrassment to them. Research on cargo crime has been conducted in few countries such as United States of America [1], Holland [2], Australia [3], Sweden [4] and European Union [5].

2. Literature Review

2.1 The role of Transportation in a Supply Chain

A supply chain consists of all parties involved, directly or indirectly, in fulfilling a customer request [6]. The supply chain includes not only the manufacturer and suppliers, but also transporters, warehouses, retailers and even customer themselves. Within each organization, such as manufacturer, the supply chain includes all functions involved in receiving and filling a customer request. These functions include, but are not limited to, new products development, marketing, operations, distributions, finances and customer services. A supply chain activity is a dynamic process and involves the constant flow of information, product and funds between different stages. At each stage, the supply chain is connected through the flow of products, information and funds. These flows often occur in both directions and may be managed by one of the stages or an intermediary. The objective of every supply chain is to maximize the overall value generated. The value a supply chain generated is the difference between what the final product is worth to the customer and the costs of the supply chain incurs in filling the customer's request.

Transportation is one of the activities within the supply chain and it refers to the movement of product from one location to another as it makes its way from the beginning of a supply chain to the customer. Transportation is an important supply chain driver because products are rarely produced and consumed in the same location and industry is very dependent on the transportation to transfer their products. Transportation is a significant component of the costs incurred by most supply chains. The role of transportation is even more significant in global supply chains. Transportation allows products to move across global network of a company. Similarly, global transportation allows retailers to sell products manufactured all over the world to be sold in different countries. International trade is becoming a bigger part of the world's economic activity. The Malaysian logistics industry was expected to grow 10.3 per cent to RM129.93 billion in 2012, a marked increase from an estimated RM117.8 billion a year ago and external trade for Malaysia was expected to increase 5.9 per cent to RM1.42 trillion in 2012, compared with RM1.24 trillion in 2011 [7]. Kamarul commented that the growth of Malaysia external trade signifies the growth of the transportation and logistics industry [7]. Whereas Gopal Frost & Sullivan Vice President for transportation and logistics Asia Pacific and country head for Malaysia said Malaysia's strategic advantage due to its geographical location [8]. The focus on improving supply chain efficiency will also drive growth in the local logistics industry as reported in Malaysia Logistics Directory 2012/2013 [27]. The Malaysian logistics industry is forecasted to grow at a compound annual growth rate of 11.6 per cent to reach RM203.71 billion in 2016 [27].

Any supply chain's success is closely linked to the appropriate use of a secured and safe transportation. Supply chains also use responsive transportation to centralize inventories and operate with fewer facilities. This has created more activities within the transportation industries. To understand transportation in a supply chain, it is important to consider the perspective of four mode of transportation namely locomotives/rail, trucks, airplane and ship which are being used as a mode of transportation. We can think of a transportation networks as a collection of nodes and links. Transportation originates and ends at nodes and travels on links. For most modes of transportation, infrastructure such as ports, roads, waterway and airports is required both at the nodes and links. Most transportation infrastructure is owned and managed as a public good throughout the world. It is very important that infrastructure be managed in such a way that monies are available for maintenance and investment in further capacity as needed.

2.2 Cargo Thieves becomes Professional

Cargo thieves are becoming more strategic about how they strike. A thriving black market keeps cargo thieves in business to the detriment of the global economy. Cargo theft has been around for centuries, from robbers attacking merchants on trading roads to pirates seizing ships at sea to bandits on horseback robbing stage coaches. Unfortunately, crime has evolved along with cargo transportation methods. Trucks have replaced horse-drawn carriages, and today's bandits are organized into international crime syndicates. Cargo theft is an international problem affecting consumers and businesses alike. In today's global economy, raw materials manufacturing and sourcing often occurs in one part of the world, while the finished product is warehoused and consumed in another. Cargo can be stolen at any point in between, compromising product integrity and availability. Cargo thieves are becoming very professional and work in highly organized groups, targeting specific items and employing people who are specialist who can bring a different set of criminal skills to the group. Take for example professional cargo thieves, whose bases of operations are truck yards, hubs for commercial freight cargoes, airports and sea ports. While other criminal target cash and valuable items, these professionals make of with other goods. Cargo thieves used sophisticated operations with well organized hierarchies of leadership. They employ specialists who can carry out different tasks and responsibilities including thieves and brokers or fences that help upload the stolen goods. The fences also work with drivers in transferring the stolen goods on the black market. Sometimes foreign labourers were used to move the goods and work with drivers in transporting the stolen merchandize from the docks. In fencing, goods are brought from another who is in illegal possession of those goods. The cargoes stolen will be disposed through fences for local market and sometimes the cargoes are taken out of the country in a very short time to avoid being detected by the Police. Those gangs usually employ a specialist who is an expert at foiling the anti-theft locks on truck trailers. Cargo thieves heist whole truck load of merchandize – the average freight on a trailer can be valued at up to few million dollars depending the type of cargoes. There are many cases especially cargo of electronics were hijacked in Malaysia and found in the black market overseas the next day. This is how efficient and sophisticated network the professional cargo thieves are having.

Many times, global economic crisis has increased worldwide demand for black market goods. In the United States, where an estimated \$30 billion in cargo is stolen annually, cargo thieves are sophisticated, organized, and,

generally, not home-grown [19]. Palmer reviewed that the thieves are often recruited from the United States and trained by Cuban crime syndicates, then sent to Florida to establish their operations [19]. Most of the stolen cargo in the United States is brought to ports and exported in ocean containers to countries such as Paraguay, Venezuela, Colombia, Brazil, Argentina, the Dominican Republic, and Costa Rica. From there, it is sold through black market distribution channels. A range of new cargo theft tactics are being deployed to help thieves take better control and thus mitigate the risks of the crimes they are trying to commit, according to experts with insurance provider Travelers in an interview with Fleet Owner, Sam Rizzitelli, national director for transportation at Traveler Inland Marine division [20]. Rizzitelli explained that these new tactics fall into three categories: identity theft, fictitious pickups and misdirected loads/fraudulent carriers. They are trying to adjust their methods to develop better ways to get away with cargo. Rather than commit straight theft; where loads are physically stolen from parking lots or terminals and risking getting spotted and/or potentially be involved in a high speed chase; the cargo thieves are trying to be more strategic about thefts so they can better pinpoint and steal specific types of cargo. More of these strategic kinds of thefts due to a combination of factors: more technology being used with greater access to information within the transportation industry and the involvement of more intermediaries throughout the supply chain. This allows cargo thieves to be in better control of the timing and location of a theft is made. In many cases, getting the desired cargoes and handed over to the criminal rather than having to hunt it down and steal them.

Criminal elements are becoming increasingly creative in using the internet to pull off cargo thefts throughout the supply chain, law enforcement detectives told a meeting of Harbour Truckers for a Sustainable Future in Long Beach, USA [21]. Cargo thieves are using the internet to track shipments, book transportation with legitimate motor carriers or, conversely set up bogus trucking operations that arrange cargo pick-ups for legitimate shippers and forwarders. These thieves called a legitimate harbour trucking company whose drivers have the credentials to pick up the container at the marine terminal and deliver it to a non-descript warehouse location. Another ploy is for thieves to advertise on-line as a trucking company. Cargo interests or intermediaries whose regular motor carrier is unavailable for a particular job will hire the sham operation. The fly-by-night operator may hold the cargo hostage and demand a large sum of money to release it, or the thief may sell the merchandise. Even rival street gangs that are known for their involvement in the narcotics trade are cooperating with each other in cargo theft activities because stolen merchandise such as flat-screen TVs are easy to sell, and penalties if caught are not severe, said

Chae Song, a detective with the Los Angeles County Sheriff's Department [21]. Cargo theft is a multi-billion dollar criminal enterprise in the U.S., and the FBI has seven task forces located around the country to combat the problem. In the Memphis region, Special Agent Conrad Straube, coordinator of the Memphis cargo Theft Task Force reported that there is an average of one cargo theft everyday of the year and from January 2011 to end of September 2011 and task force recovered more than USD\$1.5 million in stolen cargoes and vehicles [22]. Some of the theft crews are so organized that each member has their own specialty, from the break-in artist who can steal a rig in seconds to professional drivers, surveillance experts and the guys who know how to defeat the specialized devices that lock trailers carrying extremely valuable loads. Conrad agreed that thieves often rob warehouses on a Friday night and by the time the crime is discovered and reported on Monday morning, the stolen merchandise may already be on a store shelf or auctioned online [22]. Cargo crime is sophisticated and becoming an organized enterprise.

2.3 The Impact of Cargo Theft

Attached below are some of the impacts or consequences of cargo theft which may affect the transportation industries:

- i. For a business operating on a just-in-time basis, the loss of goods may threaten viability—particularly if insurance cover is inadequate or compensation payments are contested.
- ii. Companies can be exposed to litigation, liability suits or other attacks on their brand name through theft related circumstances - stolen goods can be out of date or ineffective due to bad storage which exposes the company to dissatisfied customers who bought these goods in good faith.
- iii. Stolen goods reduce profits exponentially by losses in sales opportunities caused by the distributors – where the competition is selling the goods without these “extra theft cost”, the distributors goods will never be able to compete.
- iv. Further, the illegal sale of stolen cargo undercuts prices in legitimate businesses

The source of risk for cargo theft in the transportation network comes from theft opportunities. The perpetrator has flexibility relative to time, place, method and the type of crime committed. In reality, perpetrators are normally limited in their mobility, adaptability and flexibility, relative to a particular crime, place, time and method [2]. These opportunities are highly specific and concentrated in time and place. This is the result of required scheduling and fixed assets of the normal activities within the supply chain. This gives the perpetrators the opportunity to really

attack at the weakest point in the transportation network e.g. certain area of the Malaysia highway. The risk of cargo theft can be reduced by initiating resilient countermeasures focusing on reducing theft opportunities. The theory of crime displacement states that within the potential perpetrators' capability, the perpetrators will change their criminal pattern in response to countermeasures implemented by the authorities or security professional. Figure 7 revealed the total number of people has been detained by the Police under Malaysia crime preventative law i.e. Emergency (Public Order and Prevention of Crime) Ordinance (EO) 1969. During this period, the problem of attacks against trucks received more attention than before. The Police effort to address the hijacking cases where it rampantly happened from the transportation network has actually changed the cargo theft pattern instead of absolute reduction. The crime displacement effect may be one likely explanation for this development. This fulfils Hesselings' conclusion that crime displacement is possible, but not inevitable consequence of crime prevention [2].

2.4 Lack of Control in Supply Chain Security

Many companies have not yet invested in improving security beyond the minimum level due to difficulty in justifying security investments [16]. Companies may not yet see the benefits of enhanced security or may be unable to make an adequate business case for security implementation. That is because penalties for non-compliance with new security standards are minimal or non-existent and the benefits are difficult to measure [17]. However, supply chain security management is not a black hole and it is believed that secured supply chains do provide a return on investment for transportation and logistics companies. Research has quantified the tangible business benefits of investing in supply chain security efforts. Area positively influenced by security efforts includes supply chain visibility (50% increase in access to supply chain data, 30% increase in timeliness of shipping information), improvements in inventory management (14% reduction in excess inventory, 12% increase in reported on-time delivery), more efficient customs clearance processes (49% reduction in cargo delays, 48% reduction in cargo inspection or examinations) and in the long-term benefiting the customer relationship (20% increase in new customers and 26% reduction in customer attrition [18].

2.5 Contribution of logistics industry in Malaysia

The contribution of the logistics industry (encompassing transport, storage and communication services) to the Malaysian economy in 2005 was 8.8 per cent to Malaysia's GDP [27]. To give more focus on logistics

sector, the Government has set up the Malaysia Logistics Council (MLC) in February 2007 to be the focal point for the overall coordination on strategies, policies, regulations and rules for the logistics sector. Currently, there are more than 22,000 companies in the logistics industry in Malaysia involved in multiple areas of activities to enhance this industry [9]. It has been forecasted that the future of Malaysian logistics industry is expected to increase by 11.5 per cent equalling to RM121 billion in 2012 as compared to RM108.5 billion in 2011; furthermore, it was forecasted to grow at a compound annual growth rate (CAGR) of 12.6 per cent to arrive at RM196.5 billion in 2015 [9]. This is largely due to the import-export forwarding, shipping and airfreight related businesses, high technology and capital intensive projects under the 10th Malaysia Plan and Economic Transformation Program (ETP) which acts as a catalyst in creating opportunities for Malaysia's logistics market. Foreign direct investments are likely to flow into the electronics and electrical, oil and gas, healthcare and solar-related industries.

Gopal reported in The Star Bizweek Saturday 7th January 2012 and also reported in Malaysia Logistic Directory 2012/2013 (16th Edition) that Malaysia's advantage is due to its strategic location and focus on improving supply-chain efficiency will also drive growth in the logistics industry [8] & [27]. Gopal added that the logistics industry is poised to enjoy double-digit growth with a projected compounded annual growth rate of 11.6% to reach a staggering RM203.71 billion in 2016 as reported in Malaysia external trade [8]. It is expected to increase 5.9% year-on-year to RM1.32 trillion in 2012, from RM1.24 trillion in 2011[8]. The growth of external trade would spur growth of the transportation and logistics industry, especially for import and export forwarding, air freight and ocean freight related businesses [27]. Total trade for the first 11 months in 2011 was valued at RM1.156 trillion, up 8.7% from the corresponding period in 2010[27]. Exports rose by 9% to RM633.81 billion while imports expanded by 8.4% to RM521.81 billion, resulting in a trade surplus of RM112 billion during the same period. In terms of cargo volumes, total cargo volume was expected to increase 10.1% from 495.29 million tonnes in 2011 to 545.13 million tonnes in 2012 [27]. In 2011, sea freight was the most popular mode of transport for cargoes in Malaysia, handling more than 90% of total freight traffic. Port Klang and Port of Tanjung Pelepas contributed 39.2% and 22.7% of total sea throughput in 2011, respectively. The quality and availability of trade-related infrastructure such as roads, railways and ports play important roles in the logistics performance in Malaysia. Similarly, efficient border management and coordination of transportation agencies involved at the border clearance are critical.

3 Methodology

Crime information can be obtained from police crime or incident records and, where available, the records of other agencies. Information on different aspects of a crime problem can be shared between agencies, to provide a fuller picture. Obviously, this pooling of information must be subject to safeguards. However, since crime analysis is concerned with patterns and trends, for which information on personal identity is not required, the sharing of information should not present a problem. Although the task of data collection and analysis should be able to draw on information collected; existing records may sometimes provide an inadequate basis. This can be the case with police crime records, where many victims may have chosen not to report the offence they suffered [30] & [31]. Where the official database is inadequate it may be necessary to supplement it by setting up special recording exercises, surveys or direct observation.

3.2 Data Collection

This section begins with a description of the information likely to be useful in crime analysis, follows with a comment on the quality of the information collected, and concludes by considering some practical points such as the value of routine versus special data collection exercises. While the needs of the different preventive projects and the crime analyses supporting them will vary, as will the information available, it is possible to list some of the information it will generally be useful to collect. A 'snapshot' of cargo crimes committed in any given area in Malaysia will inevitably show some kind of clustering. As far as evaluation is concerned the stronger the element of random fluctuation; the greater the difficulty of making a conclusive judgment [32]. Most maps of criminal incidents lie somewhere in between, and it is the task of the analyst to decide what proportion of the observed picture can be ascribed to an enduring pattern, and what proportion is random.

3.1 Crime analysis: interpretation and presentation of the results

The crime profile revealed by the analysis of data will of course have been subject to a continuing process of interpretation during the exploration of the data. This process can now be completed, by an investigation of situational, and social/background factors. Interpretation of the pattern of offending identified involves drawing on social and demographic information on the area in question, talking to people with local knowledge, making site visits and cautiously applying criminological knowledge and theories. From the situational perspective,

a trouble spot may be interpreted as reflecting a particular criminal opportunity [33], [34] or a pattern of social activity which brings offenders into contact with victims, or their property [35].

4. Discussion

4.1 Cargo Statistic in Malaysia

Figure 1 shows the growth of export in Malaysia continues to grow from year to year except in 2009 where economy downturn affected the growth in sea ports sector. Handling of containers at seaport is very consistent as reported in Figure 2 [28]. As for cargoes handled in the airport sector, international cargo continues to grow from 2001 until 2006 at peak of 861,709 metric tons and decline for 3 years after that due to economic downturn [28]. The volume of the airport sector increase again after 2009. Figure 3 shows the comparison of different sectors and transportation using air mode is significant than the other sectors [28]. The road sector is not reported here as eventually all the incoming or outgoing will have to use road transportation to the seaport, airport and also railway. In Malaysia the road transportation handled more than 1,400,000 tonne metric year if we take the combination of all the sectors volumes using road transportation before arriving at the ports. It is therefore can be concluded that the risk of cargo movements on the road is high and organization should be taking security control measures to ensure their cargo is safe while on the road en-route to their destination.

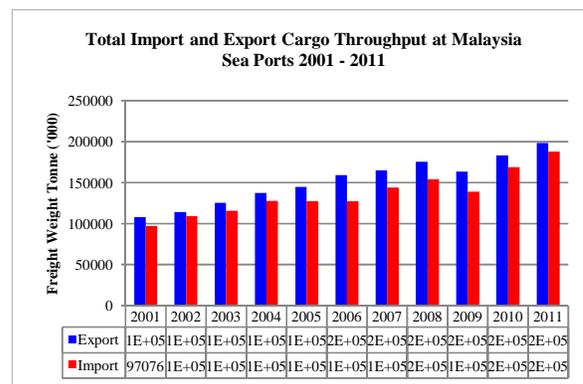


Figure 1: Mail movements at all Malaysian airports
Source: Statistics from Malaysia Ministry of Transportation

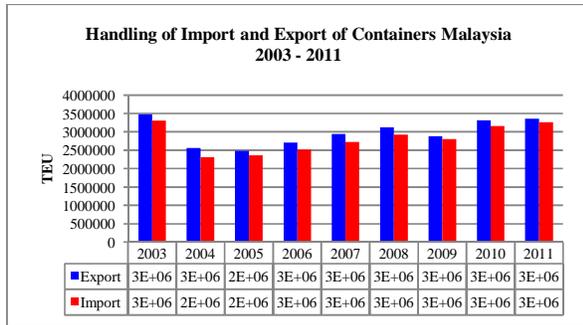


Figure 2: Cargo movement at all Malaysians airports
Source: Statistics from Malaysia Ministry of Transportation

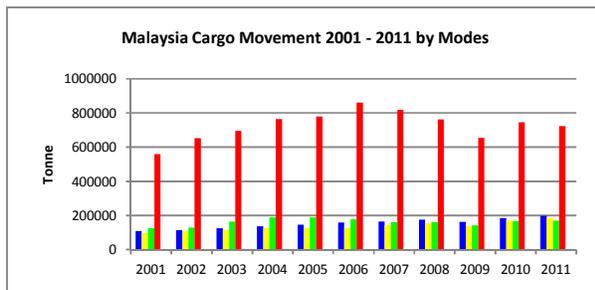


Figure 3: Cargo movement at all Malaysians airports
Source: Statistics from Malaysia Ministry of Transportation

4.2 Cargo Crime Statistics in Malaysia

Cargo theft in Malaysia is now the second highest in Asia-Pacific region by value and expected to increase as more cargo from Singapore (the world's busiest port), is routed overland through Malaysia peninsula, the *New York Times* reported [10]. The US daily, quoting figures compiled by the Transported Asset Protection Association, said more than US\$22.7 million (RM68.9 million) worth of goods was reported stolen from Malaysian ports, airports, warehouses and trucks from 2007 to 2010 [10]. The reluctance of companies in Malaysia to report losses that could impact insurance premiums mean that the total value of goods stolen here is likely higher. While transporting goods through Asia-Pacific countries is generally safer than other parts of the world like the Americas, Africa and Europe, there's little question that cargo theft and supply chain risk have increased throughout Asia, the *New York Times* quoted [10]. Malaysia, which lies along a number of important trading routes, is a particular concern. Malaysia is increasingly becoming a key thoroughfare, as more companies ship their goods to and from neighbouring Singapore, which is connected with much of the rest of Southeast Asia by road through Malaysia. This has led companies to take greater security measures like employing armed guards, using

electronic seals and installing GPS systems onboard their trucks in Malaysia to prevent them from being hijacked.

Figure 4 shows the statistic of cargo crime in Malaysia and this figure is retrieved from reliable source. Although the trend of cargo crime is on the decline in recent years, the economic impact is still massive and the cost of cargo thefts runs into the millions. Generally the trend of cargo crime has been decreasing from year to year. At the moment, it is not certain why these cases have been decreasing.

Year	03	04	05	06	07	08	09	10	11
Hijack	64	95	162	223	164	93	36	42	12
Warehouse robbery	96	58	50	69	59	65	19	10	6
Warehouse break-in	200	12	4	32	2	5	1	1	0
Theft of laden truck	30	17	11	33	20	19	9	7	3
Total	390	182	227	357	245	182	65	60	21

Figure 4 Malaysia Cargo Crime Statistics by Type
Source: Retrieved from reliable source.

Hijacking of trucks with cargoes is a cause of great concern as well as a burden to Malaysia economy and the transportation industries. It may also impact the Foreign Direct Investment (FDI) into Malaysia as high crime rate will impact the investors to move away from Malaysia. It is important that the industry players who have interest in supply chain such as the Malaysia Police Force, ports operators, security professional and transportation industries develop a cooperative approach to the problem faced. Success can only be achieved if all the players combine their effort and cooperate with each others. In order to achieve the cooperative approach; it is the utmost important that criminological analysis of the phenomenon such as crime perpetrator, victims, justice system, the development of prevention and the theories explaining the phenomenon be conducted. Despite the highly scientific relevance, it appears that too little research especially in Malaysia; has been performed to identify factors related to the cargo crime within the supply chain security in Malaysia. There is a need to have a better understanding as to why there is no absolute reduction in crime despite preventive measures taken by the authority to prevent crime.

In 2009, 716 peoples were arrested and have been detained under Section 4 (1) of Emergency (Public Order and Prevention of Crime) Ordinance (EO) 1969. Another 220 people were arrested under Sec 4A (1) and banished from their residence. In 2010, 768 people were arrested under Sec 4(1) and 385 under 4A (1). A total of 716 people were arrested in the first eight months of 2011 as

reported by Shaïla Kosky and Shahanaaz Habib in *The Star*, Malaysia daily newspaper [11]. Those arrested are suspected to be involved in cargo crimes, theft of vehicles and various crimes involving property. The numbers of hijacking cases drop drastically since 2009 and this correlates with the actions taken by the Police of arresting suspects and detained them. Detainees under Section 4(1) are held in one of the three EO detention centres in the country; Simpang Renggam, Machang and Muar. Besides detention, police also use Section 4A(1) of the EO; which provides banishment of suspects to other states or districts and restricts their residence for two years and imposes other conditions like reporting to the police on a daily or weekly basis. Police were forced to use the Emergency Ordinance in cases where the Police were certain the suspect had committed the crime but there was insufficient evidence for a conviction in court. Sometimes the police were unable to charge the suspects in court as the witnesses are too afraid to come forward and testify the suspects. The victims are too afraid of the criminals as these organized criminal may harm them and their family members if the case is being brought to court. On 15 September 2011 this crime preventive law has been repealed by the government and the detainees under this legislation were released unconditionally. Since the repealing of this law, generally serious crime has increased recently and the numbers of cargo crime may increase again as the detainees released may continue to operate again.

On June 25th 2013 it was reported in *The Sun* daily in Malaysia that the research team on crime and policing from Universiti Sains Malaysia knew that Malaysia was going to see a significant surge in violent crime especially those involved gangs and recidivist (repeated offenders) based on their extensive research [12]. Associate Professor Sundramoorthy in criminology attached to Universiti Sains Malaysia urged the authority to relook preventive laws to rein in criminals as reported in *The Star* on June 26th 2013 [13]. In place of the Emergency Ordinance, a new law to deal with hardcore criminals, with a built-in mechanism to stop abuses by the authorities should be drawn up [14]. A new law to replace the Emergency Ordinance (EO) is being finalized to bring to book ex-detainees who have found to be partly responsible for the rising crime rate [15]. On July 5th 2013 as reported in *The Sun* daily, Home Affair Minister of Malaysia, Datuk Seri Zahid Hamidi, said the move was necessary in the wake of rising crime attributed to ex-EO detainees who did not fear arrest after the repealing of the Emergency Ordinance [15][29].

4.3 Discussion Cargo crime legislation in Malaysia

Cargo can be classified as movable property in the Law of Malaysia. The act or moving the property unlawfully, which is criminal only by reason of its being done with a criminal knowledge or intention, is done by several persons, each of such persons who joins in the act with such knowledge or intention, is liable for the act in the same manner as if the act were done by him alone with that knowledge or intention. The crime act of committing cargo crime involved the stealing of the vehicle and the content i.e. cargo within the vehicle can be considered committing a theft of the laden cargo or the vehicles itself. Whereas in a more serious situation; the act can be classified as robbery whether committed by a single or gang robbery. During gang robbery where victim is injured or hurt then punishment can become more severe. The offender shall be punished with imprisonment for a term which may extend to twenty years, and shall also be liable to whipping. If the robbery is not gang robbery and without hurting the victim then the punishment shall be imprisonment for a term which may extend to ten years and shall also be liable to fine. But if the robbery is committed between sunset and sunrise the imprisonment may be extended to fourteen years, and the offender shall also be liable to fine or to whipping. The punishment is not severe if it is committed by less than 5 persons, not injuring the victim and commit within daytime. Then this crime can be very lucrative as the punishment is imprisonment for a term which may extend to ten years only and shall also be liable to fine. The losses for victim can cost millions and the Law of Malaysia on cargo crime cannot be a deterrence to reduce or evade cargo crime. With the repealed of the Emergency Ordinance 1969, member of the cargo crime syndicate will continue to target cargo on the road unless there are some other crime which is more lucrative and less risk to the criminal. In reality the punishment hardly hit the maximum and thus criminal received less severe punishment for the crime they have committed.

4.4 Cargo crime legislation in USA

Legislation and the punishment for hijacking cases in United States can be more severe compared to Malaysia. Cargo theft is attractive to thieves because the risk is low and the payoff is high, and it's an area increasingly dominated by organized criminal gangs. Increasingly, cargo theft is viewed not just as an issue for those who transport the goods, but as a problem that needs to be dealt with by the supply chain as a whole. In the United States, truck hijacking cases compromise less than 2% of all cargo theft activities. Defined as the in-transit theft of goods through the use of violence or threat of violence, hijacking of tractors - trailer is generally attributed to local gangs trying to make a quick buck when the opportunities arise. Professional cargo gangs such as those operating

out of South Florida, New Jersey or other crime hotbeds understand that hijacking is a higher level of crime, drawing more attention from law enforcement and dramatically stiffer penalties for conviction (not to mention increase risk of detection and capture due to the driver's presence at the time of the theft [23]. Francis reported in Louisville, Kentucky (USA) that hijacking big trucks and their valuable cargo is a problem we may not have heard much about [24]. But it was big enough for the state of Kentucky to take legislative action because it had an impact on the city's largest employer. "*This bill has many names but what we are talking about is piracy,*" says the secretary for the Kentucky Justice Cabinet, J. Michael Brown. Brown was describing what has been the growing problem of criminals stealing trucks for their valuable cargo. "*A new breed of criminals has been targeting trucks, hijacking and stealing the cargo,*" says Kentucky Governor Steve Beshear in Louisville who took part in a ceremonial signing of House Bill 161, known as the Cargo Security Bill. Brown was describing what has been the growing problem if criminals stealing trucks for their valuable cargo [24]. The thieves have mostly been targeting shipments of expensive pharmaceuticals and high tech products like cell phones and laptops.

5. Conclusion

Global trade is no longer just about moving goods quickly and efficiently, it is also about moving goods securely. As many as 25 different parties are involved in the global movement of just one container [25]. The chain encompasses different representatives of buyers, sellers, inland freighters, shipping companies, intermediaries, financiers, governments and the list goes on. With so many different supply chain operators involved, the risk of supply chain disruptions and vulnerability to external intervention increases. A supply chain security is very critical for today's supply chain business. One supply chain partner may have excellent internal security efforts but if others in the supply chain are lacking adequate security efforts, or if there isn't sufficient coordination between supply chain partners, those efforts may be for naught [26]. Supply chain security management needs to be all encompassing and supported by all players in the supply chain. Long term partnership with supply chain players is a necessary first step, but securing the supply chain will require an even greater commitment. It is believed that a supply chain security strategy which is cross-institutional and international, including all players of the supply chain is absolutely critical. For the practical theft prevention in the supply chain, the total displacement idea seems ideal, but in reality, it is more important for the supply chain professionals, security professionals and government authority work together to take the holistic approach in managing crime within the supply chain in

Malaysia. The research on supply chain security needs more attention from both academicians as well as from the government agency, security professional and business itself. The different involvement of authorities had already increased their attention due to the implementation of different supply chain security programmes. But the holistic research approach is still missing. In order to understand more deeply and prevent cargo crime within the supply chain, the element of perpetrators must be included in the analysis. This will lead to create new crime theories. The knowledge about crime theory where cargo crime research needs to continue and elaborate with theories from other scientific fields. The cargo crime statistics in the official reports linked to primarily cargo theft indicates that there is a need to conduct research why cargo crime continue to exist despite the action taken by authorities especially the Police to prevent cargo crime. This statement is only valid for the whole system; certain actors/stakeholder may very well be in a situation where it is cheaper to prevent the problem than to have it around and prevention is always better than cure. This may be one interpretation why cargo crime still exist today and probably will continue to be a part of the supply chain security in Malaysia.

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