ASEAN ECONOMIC COMMUNITY 2015: A CASE STUDY ON THE POTENTIAL IMPACTS TO PENANG PORT SDN BHD

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ASEAN ECONOMIC COMMUNITY 2015: A CASE STUDY ON THE POTENTIAL IMPACTS TO PENANG PORT SDN BHD

By

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

July 2015
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ABSTRACT

This study is undertaken to examine on how ASEAN Economic Community plays their role to the Penang Port Sdn Bhd and how the key characteristics of AEC can be affected to Penang Port Sdn Bhd. To achieve these objectives, there are only qualitative method was used which is in depth interview by the representatives of Penang Port Sdn Bhd management team. The finding from the research showed the level of awareness among management team in Penang Port Sdn Bhd about ASEAN Economic Community 2015, the potential impact of ASEAN Economic Community 2015 to Penang Port Sdn Bhd including opportunities and threats. Lastly, it is regarding Penang Port Sdn Bhd readiness to overcome ASEAN Economic Community 2015.
ACKNOWLEDGEMENT

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CHAPTER 1

INTRODUCTION

1.0 Introduction

In this chapter, it will represent the background of the study, problem statement, research questions, research objectives, propositions, significant of the study and summary of the chapter.

1.1 Background of the study

Since 1976, ASEAN has implemented intra regional economic cooperation as a part of the structural changes of the world economy. Establishment of the ASEAN Community is a new goal of ASEAN which consisted of three pillars; ASEAN Political Security Community, ASEAN Economic Community, and ASEAN Socio Cultural Community.

ASEAN Political Security Community consist the following three key characteristics which are, i) a rules-based Community of shared values and norms, ii) a cohesive, peaceful, stable and resilient region with shared responsibility for comprehensive security, and iii) a dynamic and outward-looking region in an increasingly integrated and interdependent world. Next, the ASEAN Economic Community consist the following key characteristic, i) a single market and production base, ii) a highly competitive economic region, iii) a region of equitable economic development, and iv) a region fully integrated into the global economy. Lastly, The ASEAN Socio Cultural Community is characterised by these characteristics, i) human
development, ii) social welfare and protection, iii) social justice and rights, iv) ensuring environmental sustainability, v) building ASEAN identity, vi) narrowing the development gap (ASEAN Secretariat, 2009).

The Association launched a vision for 2020 in December 1997 that emphasizing the objective of “…transforming ASEAN into a stable, prosperous, and highly competitive region with equitable economic development, and reduced poverty and socio-economic disparities.” However, in order to drive deep economic integration, accelerate growth and boost development, ASEAN members had agreed to an ASEAN Economic Community (AEC) Blueprint with the aim of achieving a single market and production base by the year 2015. Meanwhile, the AEC also seeks to bridge the development divide amongst ASEAN countries by doing this (ASEAN Secretariat, 2013). In other words, ASEAN Economic Community main purpose is narrowing the development gap and to promote economic development towards uplifting the well-being of the people in the region.

AEC is based on a convergence of interests among ASEAN Member Countries with the realisation of the end goal of economic integration in the Vision 2020, which is to deepen and broaden economic integration through existing and new initiatives with clear timelines (ASEAN Secretariat, 2009). AEC is dealing directly with economic stuffs as an economic integration. Therefore, ASEAN’s it will be directly impact not only the ASEAN’s entire members, but also about the potentiality and possibility of a real regional integration, either it be facing obstacles of cooperation or successfully established among the economics of members. For example, some observers criticized
the AEC development "too slow" and said that the issues that have been delayed and could make or break the success of the integration (Charumanee, 2012). Furthermore, 2015 is less than a year from now, but the development gap among ASEAN members is still wide while India and China being a big challenge for the AEC because the competition from these two fast growing emerging economic powers. Therefore, the ASEAN countries needs to deepen their economic integration and increase efficiency of all economic transaction in the region in order to tackle these emerging competitors.

AEC is derived from ASEAN Free Trade Area (AFTA). This is because the primary objective of AFTA was to increase ASEAN’s position as a competitive production base for both the regional and world markets by attract more foreign direct investments (FDIs) and eliminating intra ASEAN tariffs and non tariff barriers (NTBs) into the region. In addition, AFTA was also created as a the expansion of the European Union (EU) and North American Free Trade Area (NAFTA) as a response to other emerging regional groupings. It was also to leverage on the huge potentials and complementarities that exist in the region in order to deepen and strengthen intra ASEAN industrial linkages including creating strong and competitive in small and medium enterprises.

There were several reasons why AEC was proposed. Firstly, regional free trade (via AFTA) alone seemed inadequate for ASEAN members to cope with the challenges of globalization, especially with the rise of China and India. The region needed to be economically stronger, if not bigger in size, to be able to take advantage of the opportunities from globalization and compete against the emerging giants (McGillivray
& Carpenter, 2013). Other than that, (Plummer, 2006) suggests other reasons such as the possibility that bilateral FTAs which ASEAN members are free to engage in would compromise ASEAN integration, the desire to create a post AFTA agenda, the need to deepen economic integration within ASEAN in light of the increasing dominance of free trade areas (FTAs), and the idea that in the post 1997 Asian financial crisis landscape it is recognized that cooperation in both the production and financial sectors must be carried out concurrently with free flows of skilled labour.

ASEAN are among the trade facilitation organizations besides Asia-Pacific Economic Cooperation (APEC) and World Trade Organisation (WTO) that influence maritime developments in Malaysia. According to AEC key characteristics which are to make a single market and production base, ASEAN is now working towards ASEAN Single Window (ASW) to speed up and release the good clearance of shipments and by customs authorities in the region. In addition, in order to have a free flow of investment, ASEAN Comprehensive Agreement on Investment (ACIA) had been introduced. The aim is to meet challenges of increasing competition for foreign direct investment (FDI) between ASEAN investors and ASEAN based foreign investors to increased investment protection and gain from greater liberalisation in investment.

The need for reliable provision of transportation services and logistics has increased by the introduction of globalized manufacturing and the integration of world economies under free trade agreements. Malaysia was among the leaders in port privatization with the port authorities undertaking the role of the trade facilitator, supervisor and regulator of the operations (Sgouridis, 2003). The port industry in
Malaysia has undergone many facelifts including embarking on privatization programs of its main ports throughout the country in the last three decades. The ports should be proactive in addressing the challenges of high performance and constant productivity under these competitive conditions.

There are seven major federal ports now in Malaysia which are Johor Port, Port of Tanjung Pelepas, Penang Port, Port Klang, Kemaman Port, Kuantan Port and Bintulu Port. However, the most important ports in Malaysia are Port of Tanjung Pelepas, Port Klang and Penang Port because they all have significant potential due to location for becoming international transshipment hubs international role aspirations since they are situated in the strategic area with major waterway (Malacca straits) and have. In tandem with the expansion of the economy and trade, ports in the country registered impressive growth in recent years. Port of Tanjung Pelepas and the Port Klang are ranked among the top 20 container ports in the world according to the The Journal of Commerce (2011).

The ports in Malaysia plays important role in the trading and transport and at the same time provide the link between inland transport system and shipping service. Realizing the challenges, Penang Port Sdn Bhd has been putting an effort as to become one of the main ports in Malaysia because beyond the port industry, the shipping industry has also a main role to play in the growth of the national economy.
1.2 Problem Statement

Poor accessibility of gateway ports to land based transport, port infrastructure quality and port performance can be the obstacles in achieving low cost and effective maritime transportation in the region. Hence, ASEAN Single Aviation Market (ASAM) being the ASEAN realizing target by 2015. ASEAN Single Aviation Market (ASAM) not only for air liberalisation but also solving on some of the issues of a single aviation market regarding port infrastructure, industry structure and others as well.

The objective of ASAM is to achieve an efficient, open, and competitive ASEAN maritime transport system on the roadmap for maritime transport services including passengers and freight maritime services. Implementation of a Single ASEAN Shipping Market roadmap will prove to be challenging because the need to find creative options to address the cabotage principle in the national laws of ASEAN’s countries such as Philippines and Indonesia (archipelagic countries). Moreover, infrastructure development poor implementation in the maritime transport similar to the challenge of resource mobilisation in completing the proper roads and rail links, the financing requirements for modernised port infrastructure and associated logistics infrastructure. (Pushpanathan, 2010).

By enhanced physical connectivity where can sustain economic development and deepens economic integration will ultimately result in better connectivity with East Asia and with key global market in future. However, ASEAN still has a long way to go to achieve of seamless transport connectivity in ASEAN still has a long way to go. Therefore, connectivity can help reinforce in terms of the political, economic, and socio
cultural pillars of community. The government’s policy on ports focuses on being supply driven and enhancing the utilization of ports through development and improvement of ancillary services, improving efficiency and productivity of port operations, port privatization and development and improvement of land side transportation. The government is aware that if Malaysia wants to be a global player, it is crucial for Malaysian ports to operate as business units to ensure fast turnaround times and to reduce waiting time for vessels.

The main function of the ports is to facilitate the large scale movement and delivery of goods. With the industrial sector which has evolved rapidly, it has rendered the ports environment with more competition between ports and more challenging. Nowadays, maritime freight transport has grown at a faster and many changes happened over decades. For example, freight volume and containers have grown along with the global trade and geographical dispersion of the goods. In Malaysia, this could help in investment and the development of various infrastructures to support increasing trade with the world’s nations. In just a few decades, there have been many growths of ports and shipping activities which are recognized as one of the contributors in facilitating Malaysia’s economic and trade and for the nation. The attendant impact of these initiatives on Malaysia’s own maritime sector, which has become the lifeblood of its economy, has been just as indelible. The sector has attracted huge investments in the development of various related infrastructures to support the tremendous increase in Malaysia’s trade with the region and other trading partners. The tremendous growth of ports and shipping activities in Malaysia over the years underlines the value of the maritime sector to its socio-economic well-being. Ports and ships, and the services they
provide, are recognized as essential facilitators of Malaysia’s trade, hence crucial to its economic prosperity (Khalid, 2007).

Penang Port where is located in the state of Penang on Malaysia Peninsular north west coast began two centuries ago as a haven for the region's small craft, services today with designed and constructed facilities to meet the challenges of future logistics and trade requirements affording safe and sheltered anchorage for shipping. The inadequacy of lighter age, utilisation of cargo and the mechanisation of handling prompted the operations of the Butterworth Deep Water Wharves in 1968. Meanwhile, as a fleet of ferry vessels Pengkalan Sultan Abdul Halim and Pengkalan Raja Tun Uda were constructed in operations. As recognising the potential growth of containerisation, two berths at the Butterworth Deep Water Wharves were subsequently designed and constructed to handle container operations. Penang Port became the first port in Malaysia to provide the roll on, roll off facilities to container ships with supported the latest technology equipment in 1978. On 1st January 1994, the port subsequently corporatized after 38 years of operations. Meanwhile, on 26 March 2014, Penang Port Sdn. Bhd. operates as a subsidiary of Seaport Terminal (Johor) Sdn Bhd in operating all port facilities and services as well as undertakes present and future development projects. After past of 20 years of corporatisation, Penang Port has been able to see better achievement, improvements, and full utilisation of the port.

1.3 Research Questions

Based on the above discussions, the research questions for this study are:
1.3.1 What are the level of understandings and awareness among Penang Port Sdn Bhd management team towards ASEAN Economic Community 2015?

1.3.2 What are the impact of ASEAN Economic Community 2015 on the Penang Port Sdn Bhd and its activities?

1.3.3 Are Penang Port Sdn Bhd ready and well prepared against the impact of ASEAN Economic Community 2015?

1.4 Research Objectives

Therefore, with the above research questions, the objective of this study is to examine the challenges and impact of ASEAN Economic Community 2015 towards Penang Port Sdn Bhd activities. The specific objectives of this study are:

1.4.1 To examine the level of understanding among Penang Port Sdn Bhd management team towards ASEAN Economic Community 2015.

1.4.2 To determine the potential impact, opportunities and challenges faced by Penang Port towards the implementation of the ASEAN Economic Community 2015.

1.4.3 To analyse the readiness of Penang Port Sdn Bhd in dealing with the impact of ASEAN Economic Community 2015.

1.5 Propositions

P1: The level of understanding and awareness of ASEAN Economic Community 2015 is still low among top management of Penang Port Sdn Bhd.

P2: There will be several opportunities and challenges that Penang Port Sdn Bhd facing in terms of their growth and services towards the implementation ASEAN Economic Community 2015.
P3: Penang Port Sdn Bhd is still not fully ready in dealing with the impact of ASEAN Economic Community 2015.

1.6 Significance of the Study

This study will mainly focus on how the implementation of AEC 2015 may impact the Penang Port Sdn Bhd. In order to have a better understanding on the issue, this study is conducted via face to face interview with the top management of Penang Port Sdn Bhd. Findings of this study hopefully will reveal the level of awareness among Penang Port management on the issues related to AEC 2015 and help them make the best decisions and strategies when dealing with the threats and opportunities associated with AEC implementation. Hence, the findings are expected to help Penang Port in becoming one of the most competitive ports in this region when compared with other port in Malaysia.

1.7 Summary

Background of the study, problem statement, research questions, research objectives and significance of the study had been discussed in this chapter while gives a general overview of the study.
CHAPTER 2
LITERATURE REVIEW

2.0 Introduction

This chapter analyzes more detailed about ASEAN Economic Community 2015 which review on AEC awareness, how AEC 15 works and also the challenges. Then, followed by other related economic regional integration, ASEAN port industry review, and overview Malaysian Port industry analysis, and lastly discussed about the details on Penang Port Sdn Bhd industry.

2.1 Overview of ASEAN Economic Community 2015

Since 1976, ASEAN has implemented intra-regional economic cooperation when AFTA was approved in 1992 and was established on 2003 by the six original member countries. ASEAN has a vision to be an AEC by 2015. Therefore, to achieve the vision, a blueprint was prepared with a scorecard to monitor the implementation of the blueprint and also a communications plan to inform and engage all stakeholders in the AEC building exercise (ASEAN Secretariat, 2008). Now, the new goal is to establish the AEC because it is a realization of the end goal of economic integration as outlined in the ASEAN Vision 2020. In general, AEC is a single market and production base to create a stable, prosperous and highly competitive ASEAN economic region in which there is a free flow of goods, services, capital, equitable economic development investment and reduced poverty and socio-economic disparities in year 2020 (Shimizu, 2010).
One of the three ASEAN Community Councils is the AEC. The principle objective is to look at regional economic integration by 2015. The areas of cooperation include:

- Trade financing
- Industrial integration to promote regional sourcing
- Infrastructure and communications connectivity
- Enhancing private sector involvement for the building of AEC
- Human resources development and capacity building
- Recognition of professional qualifications
- Consultation on economic and financial polices
- Electronic transactions through e-ASEAN

Based from the roadmap for AEC 2015, each member’s state are focusing and preparing on developing their regulations including capacity on trade and investment. To create a competitive market of over 600 million people in ASEAN countries, a single regional common market of ASEAN countries will be created by 2015 under the AEC. In addition, there will be free flow of goods, services, investment capital and skilled labour following the liberalization. It will include streamlining of certain administrative procedures and tariff reductions. Table 2.1 summarise all the core elements of AEC 2015 and the actions that should be taken by respective nations.

**Table 2.1: Core Elements of AEC 2015**

<table>
<thead>
<tr>
<th>Core Elements</th>
<th>Actions</th>
<th>Model Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Single Market and Production Base</td>
<td></td>
<td></td>
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<tr>
<td>1. Goods</td>
<td>• Eliminate duties, NBTs</td>
<td>• Lower</td>
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<tr>
<td>Simplify ROOs</td>
<td>Lower goods non-tariff barriers</td>
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<tr>
<td>Trade facilitation, customs integration, single windows</td>
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<tr>
<td>Harmonize standards and regulation</td>
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<tr>
<td>2. Services</td>
<td>Remove restriction on service trade</td>
<td>Lower services non-tariff barriers</td>
</tr>
<tr>
<td></td>
<td>Allow at least 70% equity participation</td>
<td>Higher FDI flows</td>
</tr>
<tr>
<td></td>
<td>Schedule commitments for Mode 4</td>
<td></td>
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<tr>
<td></td>
<td>Extend MRAs liberalize financial services</td>
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<tr>
<td>3. Investment</td>
<td>Investment protection, facilitation, promotion, liberalization</td>
<td>Higher FDI flows</td>
</tr>
<tr>
<td></td>
<td>Non-discrimination, national treatment</td>
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<tr>
<td>4. Capital</td>
<td>Harmonize regulations</td>
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<tr>
<td></td>
<td>Promote cross border capital raising</td>
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<tr>
<td>5. Labour</td>
<td>Facilitate movement of skilled and professional labour in cross border trade</td>
<td>Lower service non-tariff barriers</td>
</tr>
<tr>
<td></td>
<td>Enhance movement of students</td>
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<tr>
<td></td>
<td>Work toward harmonizing qualifications</td>
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<tr>
<td>6. Priority Sector</td>
<td>Projects in 12 priority sectors</td>
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<tr>
<td>7. Foods, agriculture, forestry</td>
<td>Harmonize best practices, SPS, safety and quality standards, chemical use, regulation of products derived from biotechnology</td>
<td>Lower goods non-tariff barriers</td>
</tr>
<tr>
<td></td>
<td>Promote technology transfer</td>
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<td>B. Competitive Economic Region</td>
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<tr>
<td>1. Competition policy</td>
<td>Introduce competition</td>
<td>Lower</td>
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<tr>
<td>2. Consumer protection</td>
<td>- Develop regional networks and guidelines</td>
<td>Goods non-tariff barriers</td>
</tr>
</tbody>
</table>
| 3. Intellectual property rights | - Implement ASEAN IPR Action Plan  
                                 - Promote regional cooperation |   |
| 4. Infrastructure | - Facilitate multimodal transport  
                          - Complete Singapore-Kunming rail link  
                          - Integrate Maritime Transport, open sky policies, single aviation market  
                          - High speed IT interconnections  
                          - ASEAN power grid, gas pipeline | - Higher FDI flows |
| 5. Taxation | - Complete bilateral agreements |   |
| 6. E-commerce | - Adopt best practices and harmonise legal infrastructure | - Lower service non-tariff barriers |

C. Equitable Economic Development

<p>| | |</p>
<table>
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</tr>
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<tbody>
<tr>
<td>1. SMEs</td>
<td>- ASEAN Blueprint of best practices</td>
</tr>
<tr>
<td>2. Initiative for integration</td>
<td>- Technical assistance and capacity building in CLMV countries</td>
</tr>
</tbody>
</table>

D. Integration into the Global Economy

<p>| | | |</p>
<table>
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</table>
| 1. Coherent approach | - Review FTA/CEPT commitments  
                           - Establish coordination and possibly common external approaches | FTA with other economies |
| 2. Supply networks | - International best practices and standards  
                          - Technical assistance |   |

(Source; ASEAN Secretariat, 2008)
2.2 Awareness on ASEAN Economic Community 2015

In general, preparations for the AEC have accomplished much, but the evidence suggests businesses are neither fully aware of the accompanying challenges nor ready to capitalize on associated opportunities. Therefore, a survey had been conducted to SME’s in the regions by the ASEAN Business Advisory Council shown that 41 percent of the respondents had limited or no knowledge of ASEAN policy initiatives (Wong & Wirjo, 2012). In addition, a set of focused interviews conducted by Richard Evans for ILO in 2013 in key enterprises from across the region indicated that four out of five global enterprises exhibited little knowledge of the AEC and its implications (Rynhart & Chang, 2014). It is also shown that, from the local and regional enterprises interviewed, all were aware of the integration process, but only 34 percent were preparing for it in anyway.

This may be explained in terms of their failure to see the value of investing in the changes coming from the AEC or alternatively, of their not understanding what they can do to take advantage of these changes. The ILO Survey also found that only 46 percent of respondents indicated they fully understood the impact AEC will have on their enterprise. Aside in Myanmar, enterprises generally responded that they had no understanding of the AEC’s upcoming impact or those they neither did nor did not understand it. Around 70 percent of respondents in Malaysia and the Philippines indicated they neither understood nor knew what to think about the upcoming AEC, signifying a prevailing mood of uncertainty regarding the looming effects of integration. (Wong & Wirjo, 2012).
2.3 Advantages of the Implementation ASEAN Economic Community 2015

According to (Charumanee, 2012), the advantages of AEC 2015 implementation are: firstly, AEC enhance in easier movement of goods, services, capital, investment and people. Next, it will enhance the scale efficiencies and competitiveness of ASEAN members and will open more regional cooperation. Lastly, it will access to new markets for established products or offer better approaches of coordinating supply chains.

2.3.1 If All ASEAN nations considered as one hub in a bigger regional market in a single market, they will become more imperative. By 2015, The ASEAN Free Trade Agreement will be extended to zero tariffs on almost all goods. ASEAN plans to stay engaged with the global economy through regional level free trade agreements such as agreements with Korea, Japan, China, India, New Zealand and Australia.

2.3.2 SMEs represented 96% of enterprises and between 50-85% of domestic employment cross wide ASEAN. Integrating these SMEs and supporting them in the starting period will be a challenge throughout ASEAN especially in the lesser developed ASEAN countries. For example, Singapore, it is obvious that the Singapore government completely understand the challenge and the opportunity that the AEC will represent to SMEs and is putting both the planning ability and the assets to better support their SMEs. Also in Thailand and Vietnam, although both countries are starting to verbalize and meet to grow more powerful plans for SME integration and support, it is clear that these plans are most likely behind where they need to be. In countries, such as Cambodia,
Myanmar and Laos, plans are even further behind and more in need of support and resources.

2.3.3 Asians travels more in the region and there are more travellers from different nations that have started to connect to Asia as new visitors. The trends were evident at the recent Hub City Forum, held by the Pacific Asia Tourism Association (PATA), where more than 100 travel industry talked about the tourism potential, government's spending to upgrade facilities both for leisure attractions and also facilities. Tourism opportunities are particularly large and hopefully countries that have the most experience in this area such as Singapore and Thailand will render their help to those with frail experience - recent examples of this are Vietnam and Thailand.

2.3.4 One of the sectors to be internationalise is healthcare. However, this is definitely a big challenge as it is more complicated than just the popularity of Singapore and Thailand’s as the "medical tourism" when patients travel from one country to another seeking better care at lower cost. However, it offers potentials for the free flow of health services and other in the region. Recent examples here were noted in the Bangkok Post which noted programs by Thailand's largest medical service BGH and other Thai hospital groups to step up the pace of mergers and acquisitions and joint ventures in other AEC countries to help give them a better platform to better take care of developing AEC opportunities. After all, the legal and licensing frameworks are still needed to be worked out.

2.3.5 Businesses need to have an international mindset, which can gives them the appetite and ability to make cross border investments and acquisitions. As seen from many investments and merger and acquisition activity that has occurred in
the region, momentum has been established. This can be seen through one of
Thailand's largest conglomerates, Siam Cement, is gearing up to spend 75% of
its $5-billion investment budget for 2012-16 to acquire assets, many in ASEAN
countries, according to the Bangkok Post, and there are other large companies
such as CP or BGH that are doing the same. Next example, Indonesia's Air Asia,
Asia's largest budget airline, is opening a regional office in Jakarta to engage
with the ASEAN Secretariat there and work toward a single ASEAN sky and
aviation authority, reported the Jakarta Post On the other hand, the Philippine
pharmaceutical company Unilab markets its affordable analgesics and cough and
cold mixtures all over Southeast Asia through joint ventures, while the Axiata
group of mobile operators is looking into network-sharing, according to the
Manila times. In late 2011, a group of business luminaries, including the CEOs
of CIMB Bank, Air Asia, Bangkok Bank and Ayala Group launched the ASEAN
Business Club, a private-sector initiative to engage in ASEAN's community
building efforts.

2.3.6 The initiative for ASEAN Integration will serve as the platform for identifying
and implementing technical assistance and capacity building programmes for
both public and private sectors in ASEAN Member Countries in order to narrow
the development gap. For example, CLMV and the other sub-regions such as The
Indonesia-Malaysia-Thailand Growth Triangle, BIMP-EAGA within ASEAN,
IMT-GT and The East ASEAN Growth Area. This is to allow them to be equal
partners in the development of regional production and distribution networks.
The objective of AEC is also to make ASEAN a more dynamic region to
compete in the global supply chain and to remain an attractive base for foreign
direct investment. In this respect, ASEAN will work towards maintaining “ASEAN Centrality” in its external economic relations, especially in its negotiations for free trade areas (FTAs) and comprehensive economic partnership (CEPs) agreements.

2.4 Challenges of ASEAN Economic Community 2015

ASEAN integration will be faced with difficulties in realistically. Since the rise of China and its increasing global share of trade and foreign direct investment each ASEAN member state has been compete for a larger share of the pie within the region particularly in the arena of foreign direct investment and tourism.

Competition for foreign direct investment primarily involves Malaysia, Singapore and Thailand. ASEAN governments have been trying the best in empowering and elevating the Secretariat despite calls for the ASEAN Secretariat to play a greater role in charting economic directions. Moreover, ASEAN countries have domestic political lobbies that are wary of the potential negative impact of AEC 2015 such as:

- Tighter margins due to increased regional competition
- Risk of over-exuberant inflows of capital
- Possible marginalization of unskilled workers in higher wage countries, where the influx of more cost-efficient labor will happen

A lot of factors contributed to the timely implementation of a unified trade and investment area before 2020 these include trade specialization by member countries and improved intra ASEAN political relationship. Besides, the will and desire to unite within
the region will decrease as each member experiences good growth. In other words, the successful implementation of a unified economic community highly depends on the economic insecurity of individual member countries.

The AEC will definitely be launched by 2015 but will depend on many factors that are difficult to foresee and its impact will only become apparent after 2015. The bottom line is clear for international companies and the AEC will become a reality one day, but 2015 should be seen as the end of the beginning of ASEAN economic integration rather than the ultimate deadline itself. Yet, the AEC is definitely a work in progress. While others will face more challenges and may be less crisply implemented, some efforts will go faster and bear quicker than others. AEC clearly offers clear opportunities and challenges that all businesses need to be thinking about and preparing for in future (Chia, 2013).

The implementation of AEC Blueprint’s need to be improve and become immediate priority as strategic actions so that the 2015 timelines can be met as far as possible. Problematic areas are measures pertaining to services liberalization, trade facilitation, and free flow of skilled labour. It is crucial that efforts are intensified both at regional and country levels to close the implementation gaps. Thus, legislative and regulatory limitations and effective coordination of implementation across various national ministries and agencies are among the obstacles to implementation. To gain the acceptance of legislators, government officials, business leaders, and the general public of the benefits of trade and investment liberalization and of the costs of non-action, a better effort needs to be made (Chia, 2013).
2.5 Other Related Regional Economic Integration

ASEAN have been introduced many policies towards integrating the region’s economies and creating an economically unified bloc to enhance its attractiveness and competitiveness as an economic region and a destination for foreign direct investment (Khalid, 2007). AFTA creation has played a catalyst role in regional cooperation in the transport sector. The elimination of technical trade barriers in the region under AFTA has opened up and has enlarged the regional market, providing consumers in the region with a greater choice of goods, hence boosting trade in the region. This has further resulted a virtuous cycle of sorts in the form of greater demand for goods, much improved business performance, a higher standard of living, greater income per capita and greater economic prosperity all around for millions of people in the region. The increase in intra-ASEAN trade brings the attendant rise in demand for transportation services to facilitate greater trade in the region.

AFTA has played a significant role in transforming the characteristics of many ASEAN economies from commodity based to more manufacture based, and encouraged the approach towards a more open trade and investment policy. The changes are, in a way, reflective of a larger reorganization of the world economic structure in which new businesses, organizations, systems, processes and investment strategies have emerged. Growing intra ASEAN trade and the promotion of transport initiatives on the AFTA platform have had a significant impact on the region. This is especially so in the maritime sector as the main facilitator of regional trade, given its geographical features and economic characteristics. As such, any examination of the impact of the trade and transport initiatives under AFTA must train a sharp focus on the maritime sector, namely
ports and shipping, as trade in the region is highly dependent on the seaborne mode. The sector has attracted huge investments in the development of various related infrastructures to support the tremendous increase in Malaysia’s trade with the region and other trading partners. The tremendous growth of ports and shipping activities in Malaysia over the years underlines the value of the maritime sector to its socio-economic well-being. Ports and ships, and the services they provide, are recognized as essential facilitators of Malaysia’s trade, hence crucial to its economic prosperity.

Malaysia has taken a supply driven approach to put in place and further upgrade the equipment and facilities of its ports to ensure their competitiveness to handle greater trade volume. Its major container ports, namely Port Klang, Penang Port and Port Tanjung Pelepas (PTP) have undertaken expansion projects to accommodate mega-sized deep draft ships, many of which carry intra-ASEAN trade. They are in a never-ending pursuit to enhance their competitiveness and the quality of their services by providing deeper access channels, longer berths, wider connectivity, more equipment, bigger container space, better intermodal linkages, and shorter waiting time for ships to facilitate greater regional trade which is crucial to their business. Underlining the impressive growth of container throughput at Malaysian ports is the tremendous performance of its leading container ports in the last decade. For example, PTP has emerged as the 16th largest container terminal in the world and is poised to handle more boxes with its ambitious capacity expansion drive, improving productivity and aggressive marketing (UNCTAD, 2005). It is a measure of the prosperity arising from the enlarged trade area born out of AFTA that a new port in the region and close to one
of the world’s busiest ports at that can thrive by just handling transshipment containers mainly from intra-regional trade.

Port operations in Malaysia, as is the case worldwide, have entered into a phase of sophisticated development with increasing automation and computerization of container terminal operations. There are dynamic and revolutionary changes that are taking place in various aspects of port operations to cater to greater container volume and ship sizes, requiring the use of sophisticated equipment, data exchange and communication systems. There is keen competition not only between Malaysian ports and others in the region, especially in the wider AFTA context, but also among themselves to attract cargo and users. All these exert demand on the ports to keep pace with the developments in port operations, shipping and trade to provide better services to their users and to boost their efficiency and competitiveness. Sustained high levels of economic growth have resulted in increasing complexities in the functions and operations of ports, the inland transport networks linking ports and the related institutional framework.

The central location and excellent facilities of its ports put it in good stead to capitalize on growing intra-ASEAN trade in the AFTA environment and to play an even more prominent role within the complex web of container shipping networks linking the region’s nations with other economic regions. With growing regional trade under AFTA, greater transshipment traffic is expected in the years ahead at Malaysian ports. It will provide a new source of growth on terminals which have traditionally been handling gateway cargo. The establishment and success of PTP as a transshipment hub, and the
growing regional and global connectivity of Malaysia’s main container ports, underscores the massive impact that more regional trade has had on port development in Malaysia. All these bear testimony to Malaysia’s tremendous rise and growing clout as a maritime nation, largely fueled by growing regional trade under AFTA (Khalid, 2007).

2.6 ASEAN Port Industries

47 designated ports in nine ASEAN countries (ASEAN Port Network) form the backbone of the trans-ASEAN port network in maritime transport. As sea based freight movement is crucial to trade, the development of seaports is another important physical infrastructure agenda. Therefore, in south East Asia, ports play crucial role as points of entry and exit for trade and enable businesses and consumers to have access to markets and goods. According to World Shipping Council (2013), South East Asia boasts several of the world’s busiest container ports by volume handled such as Singapore Port (2), Port Klang (12), Port of Tanjung Pelepas (18), Tanjong Priok (21), Laem Chabang (23), and Ho Chi Minh City (25).

Generally, ASEAN member’s trade growth and economic prosperity more or less rely upon their seaports. Even though there are regional logistics players and ports growing in capacity, capability, extent and sophistication but parts of the region still lack infra and services and connectivity with international markets. In addition, development in this sector across the region is still lack owing to different stages of economic developments of ASEAN member nations. Therefore, it is important to enhancing capacity and capability to handle more trade in order to offer services beyond national or regional borders and connect to global supply chains.
2.7 Port Industries in Malaysia

Ports especially are recognized as essential contributors in facilitating Malaysia’s growing international trade, hence crucial to the prosperity of its trade dependent economy. The country’s ports, have assumed a critical role in the overall pattern of trade and transport, providing a link between the shipping service and the inland transport system. Ports in Malaysia have evolved beyond places where ships load and unload cargos and passengers. The growth of ports and shipping activities in Malaysia over the years underlines the value of the maritime sector to its economic well-being and the importance of the seas to the lives of its people.

Ports in Malaysia have been producing quite a good set of financial results even during crisis in economic environment years ago. All that will change the dynamics of these ports and it is thus interesting to look at the plans these terminals have for expansion and competition as there will be a huge amount of capacity coming on stream from this year onwards. Meanwhile, the container handling performance by Malaysian ports showed a growth of 569,252 twenty-foot equivalent units (TEUs) or an increase of 2.82% on 2012 to a total 20.8 million TEUs on 2013 (Ministry of Transportation, 2013). Malaysian ports contributed to a total trade of nearly a trillion ringgit annually for the nation mainly is 47% controls by Port Klang in container handling market in the Malaysia. Meanwhile, North Butterworth Container Terminal (NBCT) in Penang Port Sdn Bhd been able to handle the capacity of 2 million TEU still has a lot more room for growth based on its available capacity (M.Ali, 2013).
Malaysia has put in place an infrastructure development plan focusing on interconnectivity among various transport modes in order to meet the challenge of matching its transport sector’s efficiency with its rapidly growing industrialized economy. This reflects the acknowledgement of the need to come up with an integrated, comprehensive approach to address the unevenness in the development of its transport modes and to integrate with an efficient, seamless link with other transport modes. Malaysia, responded to the shortage by adding new berths, converting general cargo berths to container handling and developing new ports. Port in Malaysia recently; act as crucial points of interface with other transport modes such as road, rail, river and air and most likely featuring world class facilities. Its ports, at the forefront of facilitating its trade with the world, went through intensive growth and tremendous development during its period of rapid economic development, especially in the 1990s. Even though there is limited scope for further reducing costs by increasing vessel size and the next development is likely to be more direct services from what are now feeder port, the rapid industrialization of Malaysia’s economy over the last few decades has transformed it into a manufacturing and trading nation of some stature. In addition, with higher volumes and more efficient smaller vessels, this could overcome the cost penalty of transfers in the hub ports. The carefully thought out infrastructure development policies of the government have brought about well developed transportation infrastructure and facilities such as railways, airports, highways, and especially ports in the country.
2.8 Overview of Penang Port Sdn Bhd

2.8.1 Background

Operated 24/7 and 365 days a year, Penang Port became the oldest and longest established port in Malaysia which located in the North West of Peninsula Malaysia in Penang state. Located strategically along the Straits of Malacca, Penang Port is one of the busiest shipping routes in the world. Penang Port is fully equipped to handle all types of cargo such as containers, break bulk, dry and liquid bulk and others provides a multitude of services to cater for their safe and efficient transit via the port’s various terminals and facilities. The port serves as the main gateway for shippers in the northern states of Malaysia and also the southern provinces of Thailand. Penang Port was corporatized in 1994 and recently privatized in order to further improve the operational efficiency of the port and to further enhance its service offerings.

Penang Port is unique, as it is the only port operator in Malaysia that operates ferry services linking between Georgetown (Raja Tun Uda Ferry Terminal) and Butterworth on the mainland (Sultan Abdul Halim Ferry Terminal). The port complements its maritime operations and ferry services with several services such as, towage, pilotage and own ferries repair at Bagan Dalam Dockyard. Meanwhile, the latest terminal in Penang Port having opened in 2010 after a major rebuild is the Swettenham Pier Cruise Terminal is. The Swettenham Pier Cruise Terminal has a main terminal building that is equipped with an aero-bridge for fast and safe embarkation and disembarkation of passengers. It has a main berth that is 400 metres in length with a water depth of 12m and capable of
handling the largest cruise vessels in the world. It also has 2 inner berths which are north and south, both these inner berths are used for smaller passenger vessels. Figure 2.1 shows the various installation of Penang Port Sdn Bhd.

Figure 2.1: Various Installation of Penang Port Sdn Bhd

1. Penang Port Main Office
2. Swettenham Pier Cruise Terminal
3. Pangkalan Raja Tun Ferry Terminal
4. Prai Wharves
5. North Butterworth Container Terminal
6. Butterworth Wharves
7. Vegetable Oil Tanker Pier
8. Prai Bulk Cargo Terminal
9. Pangkalan Sultan Abdul Halim Ferry Terminal
10. Bagan Dalam Dockyard

(Source; Penang Port, 2014)
Nearly 30 shipping lines and agents are serviced by Penang Port. All these shipping lines and agents provide the connectivity to the world that Penang Port requires as a gateway port to its hinterland of North Malaysia and Southern Thailand in particular. Penang Port connected to the national highways and railway grid provides North Butterworth Container Terminal (NBCT) with excellent penetration to its hinterlands. In addition, containers can be shipped directly to all the major seaports in the Far East from NBCT. This made Penang Port of choice for the shippers in the South of Thailand to become the export gateway (Penang Port Sdn Bhd, 2012).

Key elements to its continued growth are their efficiency, accessibility, sustainability and flexibility beside provides services that are not only standard in terms of container shipping but also packages that are customizable to meet the most demanding of customers at competitive rates. Operating nonstop each day and coupled with a state of the art container terminal management system with web access, this make Penang Port a port that never sleeps. Penang Port’s strategy by keeping focus and adapting to change help them to maintain their growth in terms of container handling. In addition, Penang Port is ranked 96 in the top 100 container ports in the world (Bernama, 2014).

2.8.2 Facilities, infrastructure and equipment

Penang Port’s started in 1974 in their relationship with containers when the first container was discharged at Butterworth Wharves. At that time, they only starting with a single dedicated berth in a multipurpose terminal, but now,
Penang Port provide a modern dedicated container terminal to cater for the ever growing volume of container trade in the region. Penang Port has grown steadily to achieve a throughput of more than 1.2 million TEUs in 2013 from an only annual throughput of 2,994 TEUs previously.

North Channel is a one way navigation channel with 180 metres in width and 18 kilometres in length. It has a declared depth of 11.0 metres. The tidal range in Penang Port is between 0.5 metres (Neap Tide) and 2.0 metres (Spring Tide). Table 2.2 shows sizes of ships handles by NBCT.

Table 2.2: Sizes of Ships Handles by NBCT

<table>
<thead>
<tr>
<th>BERTH</th>
<th>LENGTH (In METRES)</th>
<th>DEPTH (In METRES)</th>
<th>MAXIMUM ARRIVAL DISPLACEMENT (In TONNES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N1</td>
<td>200</td>
<td>11</td>
<td>70,000</td>
</tr>
<tr>
<td>N2</td>
<td>200</td>
<td>11</td>
<td>70,000</td>
</tr>
<tr>
<td>N3</td>
<td>200</td>
<td>11</td>
<td>72,600</td>
</tr>
<tr>
<td>N4</td>
<td>300</td>
<td>12</td>
<td>72,600</td>
</tr>
<tr>
<td>N5</td>
<td>300</td>
<td>12</td>
<td>135,000</td>
</tr>
<tr>
<td>N6</td>
<td>300</td>
<td>12</td>
<td>135,000</td>
</tr>
<tr>
<td>INNER BERTH</td>
<td>120</td>
<td>7.5</td>
<td>6,000</td>
</tr>
</tbody>
</table>

(Source; Penang Port, 2014)

A core operation for Penang Port is container operations with the North Butterworth Container Terminal (NBCT) with equipped with six berths (N1 to N6) that are 1.5 kilometres in total length 13 Quay Gantry Cranes (QGCs). Out of these 13, seven are post Panamax QGCs capable of handling vessels with 18 rows of container across with a declared productivity rate of 25 moves per hour.
per crane currently. Berth capacity currently is at 2 million TEUs per annum. Meanwhile, for faster and efficient loading operations, eight Rail Mounted Gantry (RMG) cranes service the 2,244 Ground Slots (GS) belonging to the export decks located on the wharf itself. On the other hand, NBCT is equipped with 32 RTGs of which ten units are e-RTGs (Electrified) on the landside. This is in line with Penang Port’s aim of becoming a greener port. A fleet of 60 Prime Movers and 124 trailers further expedite container operations at NBCT as well as a Reach Stacker used for empty container movements. A container yard with a land mass of nearly 59.24 hectares provides for approximately 7,104 Ground Slots as well as 1,000 reefer points while on dock depot provides the full range of container services such as surveys, repairs, washing as well reefer related services like as pre-trip inspections and etc.

Penang Port offers a complete array of facilities to handle nearly all types of non-containerised cargo in their natural form after more than four centuries. Non containerised cargo mainly consists of three cargo types which are break bulk, dry bulk and liquid-bulk. They started with handling 1.25 million tonnes of cargo in 1950, and 1960 handling 2 million tonenes, Penang Port rapidly grown increasing to handle 30 millions tones nearly in 2013. On the other hand, Butterworth Wharves handling break bulk of cargo and capable of handling 2.5 million tonnes of cargo per annum which offers a linear berth with a length of 1.05 kilometres and the characteristics of each berth is shown in Table 2.3. Penang Port provides dedicated facilities located on the mainland such as the Butterworth Wharves, Perai Bulk Cargo Terminal, Perai Wharf to handle these
cargoes in the most efficient and safest way possible to the satisfaction of all port users and stakeholders.

Nearly 1.26 million tonnes of break bulk cargo was handled by Penang Port handled in 2013. The major break-bulk commodities handled are rice, wood, moldings, iron and steel packages, machineries, iron and steel billets, and components as well as asbestos products. Various types of cargo handling equipment are equipped in Butterworth Wharves such as prime movers, trailers and forklifts to expedite operations. Both highway and the railway linkages also provide excellent connectivity to its hinterlands. Butterworth Wharves has a land mass of nearly 60.7 hectares that houses transits warehouses, storage warehouses and open spaces. Combined warehouse space is approximately 38,000m$^2$ capable of holding nearly 50,000m$^3$ of cargo at any one time. Break bulk handling performance standards in Penang Port are also ISO certified.

Table 2.3: Characteristics of Penang Port Berth

<table>
<thead>
<tr>
<th>BERTH</th>
<th>DEPTH (In METRES)</th>
<th>MAXIMUM DWT</th>
<th>MAXIMUM ARRIVAL DISPLACEMENT (In TONNES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1</td>
<td>10</td>
<td>25,000</td>
<td>40,000</td>
</tr>
<tr>
<td>W2</td>
<td>10</td>
<td>25,000</td>
<td>40,000</td>
</tr>
<tr>
<td>W3</td>
<td>9</td>
<td>25,000</td>
<td>40,000</td>
</tr>
<tr>
<td>W4</td>
<td>9</td>
<td>25,000</td>
<td>40,000</td>
</tr>
<tr>
<td>W5</td>
<td>9</td>
<td>25,000</td>
<td>40,000</td>
</tr>
<tr>
<td>W6</td>
<td>9</td>
<td>25,000</td>
<td>40,000</td>
</tr>
</tbody>
</table>

(Source; Penang Port, 2014)
To handle both dry and liquid bulks, bulk cargo terminal was built where it is located south of the Perai Power Station and to the north of the first Penang Bridge. Perai Bulk Cargo Terminal (PBCT) came with five berths and measured 632 metres in length is capable of handling 3.9 million tonnes of cargo per annum. 500 metres of berth is utilized for normal dry bulk cargo while the remaining 132 metres of berth is used for handling Dangerous Goods (DG) in either liquid or gaseous state. An inner berth measuring 154 metres in length allows for the handling of both dry and liquid bulk cargo. The design characteristics of the berths in PBCT are as follows:

<table>
<thead>
<tr>
<th>BERTH</th>
<th>DEPTH (In METRES)</th>
<th>MAXIMUM DWT</th>
<th>MAXIMUM ARRIVAL DISPLACEMENT (In TONNES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCT1</td>
<td>11</td>
<td>50,000</td>
<td>66,667</td>
</tr>
<tr>
<td>BCT2</td>
<td>11</td>
<td>25,000</td>
<td>33,300</td>
</tr>
<tr>
<td>BCT3</td>
<td>11</td>
<td>50,000</td>
<td>66,667</td>
</tr>
<tr>
<td>INNER BERTH</td>
<td>7.5</td>
<td>10,000</td>
<td>13,333</td>
</tr>
<tr>
<td>DG BERTH</td>
<td>11</td>
<td>25,000</td>
<td>33,300</td>
</tr>
</tbody>
</table>

(Source; Penang Port, 2014)

On the other hand, 2013 saw more than 4.3 million tonnes of dry bulk being handled by Penang Port (inclusive of private terminals). In 2013, nearly 67% of this tonnage was handled at PBCT alone and at the various Penang Port terminals about 3.5 million tonnes were handled. The remaining about 1.18 million tones or 33% of dry-bulk cargo were handled both at the Butterworth
Wharves and the Perai Wharf. Not to mentions, ISO certifies in handling standards for dry-bulk.

The double development of the PBCT and the Vegetable Oil Tanker Pier (VOTP) under the Third Malaysian Plan (1975 – 1980) provided Penang Port with the ability to handle all types of liquid bulk both edible and non-edible and in liquid or gaseous state. PBCT’s DG berth equipped with eight manifold arms handles all types of DG cargo in liquid and gaseous state. The development of PBCT heralded the rise of the petro chemical industry in the Perai Industrial Zone with organizations such as Toray, Acidchem and MECI being the major players located and operating in PBCT's vicinity. All liquid cargo discharged are directly piped to nearby storage facilities for storage. These storage facilities are found within the premises of the importers factories that are situated nearby. The handling rates for liquid bulk as similar to the others above are also ISO certified with a constraint being imposed by the pumping capacity of the available pipelines.

Penang Port’s began with the export of commodities such as tin, rubber, mines then to the import of raw materials production of goods in the various industrial areas and now their ability to handle all the various types of bulk cargo has propelled the nation’s growth in tandem with its aspirations. Penang Port ability and dynamism to adapt the changes have proven to be their strength in moving forward and keeping up with the constant changing times.
2.8.3 Expansion plan

Although Penang Port’s performance was satisfactory, it must be further enhanced to make it one of the most important in the region, said Datuk Seri Azmi Khalid (The Public Accounts Committee Chairman). The operator of the port, Penang Port Sdn Bhd (PPSB) had previously requested an allocation from the federal government to undertake work to deepen its channel, to attract more trading vessels to dock and operate there. It is about to deepen its channel from 11 metres to 14.5 metres, is to enable Penang Port to enhance its activities as an export route and be on par with other ports in the region (Bernama, 2011). Penang Port Sdn Bhd (PPSB) has taken a stand not to relocate the Penang Port as it is the nerve centre for economic development in the state. PPSB previously chairman, Datuk Seri Dr Hilmi Yahaya said they want the port to remain at the present site because the project to deepen the water would boost its competitiveness and enable bigger vessels to berth at the port and enhance trade (Bernama, 2010). However, Penang Port Commission chairman Tan Cheng Liang said there are still many who are not aware and there are those who consider it just as an intermediate port about Penang port and its capabilities. The port authorities were now in process of upgrading facilities, including a plan to deepen the northern channel to accommodate bigger shipping vessels (Bernama, 2009).

In addition, the Ministry of Transport has identified five key areas to enhance productivity of the Penang Port Sdn Bhd (PPSB) and compete globally. Firstly, the port must improve on its productivity especially on its work force and
equipment for port activities. Secondly, coordination among various agencies with the port needs to be enhanced. Thirdly, the sea needs dredging to serve mother vessels calling at the port. Fourthly, would be rebranding of the port to allow them to compete internationally while the fifth area will be to focus on Port-Rail-Link to boost business (New Straits Times, 2010).

According to Penang Port Annual Report 2012, 1.16 million TEUs of container been handle by North Butterworth Container Terminal (NBCT) decreased by 2.8% compared in 2011 with 1.19 million TEU. Nevertheless, the freight weight tonnage for non containerized cargo handled, however increased by 6% to 10.76 million freight weight tones (FWT). Thus, as a gateway that handles import and export, Penang Port’s performance is very much depended on the economies that its hinterland has businesses with. Despite the marginal decrease that is inevitable, Penang Port is still striving to become the preferred port in the region with continuous investment in infrastructure, technology and human capital. Their strategy is to be ready and fully prepared when the major economies pick up. They also continue to invest in the latest equipment such as gantry cranes and rail mounted gantry to cater their client needs. Penang Port has continuously developed and upgraded its facilities, offering to be in-line with its roles as a gateway port to the economic region. For the past five years, Penang Port has invested nearly RM 1.4 billion to ensure that it will be able to handle at least 2 million TEUs annually. This huge capital outlays coupled with an average crane productivity rate of 25 moves per hour per crane in 2012 led to Penang Port handling about 1.165 million TEUs in 2012. The expected rebounds in the
manufacturing sectors in China, the continued expansion of Intra-Asia trade and the continuous recovery of the US and Euro zone economies augur well for Penang Port which expects to handle more than 1.2 million TEUs in 2013.

Penang Port’s expected paradigm shift into the next level of modern efficient container terminal operators will become a reality once North Channel deepening to 14.5 metres. This will also provide cost reduction benefits to exporters and importers as it will be enable Penang Port to be connected to more ports in more parts of the world directly rather by transshipment. It is expected that Penang Port will be able to offer direct connectivity to regions such as the Middle-East, the Indian sub-continent and Africa and even Europe as a result (Penang Port Sdn Bhd, 2012). In addition, with the available resources and facilities, the port can improve its efficiency, service level, and widen the scope of services in future.

2.9 Summary

As a conclusion, the previous point in this chapter mainly concentrated on the details about ASEAN Economic Community, overview of Port industry in ASEAN as well in Malaysia, a detailed about Penang Port Sdn Bhd and how AEC related with it. The next chapter will discussed details about methodology that used in this study.
CHAPTER 3
RESEARCH METHODOLOGY

3.0 Introduction
This chapter will discussed the methods that been used to meet the objectives of the study. It consists of research design, data collection procedures, respondent of the study and data analysis. The summary would be discussed at the end of the chapter. It also shows on how the analysis of the data are been carried out in related to the objectives listed in chapter one.

3.1 Research Design
In this study, only qualitative method was used in order to fulfill the purpose of the study. According to Zikmund e tal. (2012), qualitative business research is research that addresses business objectives through techniques that allow researcher to provide elaborate interpretations of market phenomena without depending on numerical measurement. Instead, it is more researcher-dependent in that the researcher must extract meaning from unstructured responses. This type of research is used in order to gain more in-depth information that may be difficult to convey quantitatively. Moreover, the researcher analyses the data to extract its meaning and convert it to information. The qualitative methods also investigates about the 'why', and 'how' of decision making, not just 'what', 'where', 'when'.

In this study, the researcher utilised the case study type design. There are several reasons for this decision. By selecting the case study design, the researcher is able to
describe in depth the experience of the person in the institutions where the method in doing so is by using direct observation and interaction with the subject. Case study is also useful because by due to its ability to explore any area where little is known. Lastly, the researcher can also use it in cases where there is a need to have a holistic understanding of the situation, phenomenon, episode, site, group or community and also institution or organization is the general purpose of the study (Kumar, 2014)

3.1.1 Primary Data

The researcher obtained primary data from the interviews that conducted by the researcher herself. Besides, the researcher obtained the data from the semi-structured questions that had been asked to the informants.

3.1.1.1 In-depth Interview

According to Zikmund et al. (2012), one by one probing interview between trained researcher and a respondent is called depth interview. It is appropriate method to be used because the interview provides a unique opportunity to uncover rich and complex information from an individual (Cavana, Delahaye, & Sekaran, 2001). According to this author also, it mentions that a face to face interactive process can under the guidance of an experienced interviewer which encourage to interviewee to share intrinsic opinions and to dredge previously unthought of memories from the unconscious mind. The reason why researcher chooses a personal interview because of its easy to look at the respondent’s verbal and
nonverbal communication such as body language, facial expressions, and gestures which is very important to do the analysis later.

Information about the study was collected through an interview using semi-structured interview questions that has been develop beforehand to ensure that the question that will be asked will not be going out of topic of the discussion. The interview question is a written list of questions and prepared for the use by the interviewer in a person-to-person interaction.

The differences between structured and semi structured is that in semi structured interview, the mode of interaction is more flexible where there are freedom of asking question which are not in the questionnaire. It is because, by doing so, the questions that are not in the questionnaire that comes up in the middle of the interview session can be inserted into the report of the research study. The reason why interview is selected is because it is commonly used method of collecting information from people and using interaction between the interviewer and interviewee to gather data. In using this method, the researcher have the freedom to ask question and decide the format, content and the order of the question because of the flexibility in using this method.

3.2 Data Collection Procedures

Data collection procedure for this study is firstly, the researcher develop and construct relevant questions that need to be asked to the respondents in the interview session. Then, a request for the permission of interview session and explanation of the purpose of
the study were sent via email to get the approval from the Penang Port Sdn Bhd with the application letter that issued by the Ghazali Shafie Graduate School of Government, Universiti Utara Malaysia.

After gaining the approval from the Penang Port Sdn Bhd, the questions was send by an email so that they can be prepared and date of appointment was set after that.

3.3 Respondents of the Study

The respondent of this study consist of the top management of Penang Port Sdn Bhd based from the recommendation that they given. In total, three employees at the Penang Port Sdn Bhd were chosen and interview. They are referred as R1, R2 and R3 in terms of their position. R1 is a Marketing Research Executives, R2 is a Corporate Communication Executives and R3 is a Head Strategic Planning and Development.

3.4 Data Analysis

A Qualitative Data Analysis (QDA) practice had been adopted to generalize the foundation of ideas according to the theme of research via recursive process - noticing, collecting, and thinking when analyzing qualitative data and information collected. In analyzing the data and information gathered from the secondary data, content analysis was used in this study. Currently, content analysis is widely used among the researchers in analyzing various types of written documents and recorded verbal communication.

Generally, there are three steps in qualitative data analysis model which are data reduction, data display, and the drawing of conclusions as mentioned by Sekaran and
Bougie (2009). Firstly, in qualitative data analysis is data reduction which is data reduction refers to the process of selecting, coding, and categorizing the data. In fact, from the data collection this study generates large amount of data. Thus, coding and categorization was very important in the first step of data analysis. In this study, coding is a simple process which is named the data to rearranged and integrated to make easy to form the analysis. It really helps the researcher to draw meaningful conclusions about the data.

The next process that needs to be considered in reduction step is categorization. It is the process of organizing, arranging, and classifying coding units. In this case, codes and categories can be developed both inductively and deductively. While in the situations where there is no theory available, the researcher must consider a grounded theory which is codes and categories should generate inductively from the data. Sekaran and Bougie (2009) defined that grounded theory is expresses the idea that theory will emerge from data through an iterative process that involves repeated sampling, collection of data, and analysis of data until theoretical saturation is reached. The second major step to consider in qualitative data analysis is data display which refers to ways of presenting the data. In this study, the aim of this process is to assemble or reconstruct the data in a meaningful or comprehensible form through quotes the selected interviewee responds.

Finally, the third major step is drawing conclusions. This is the final stage of the qualitative data analysis process in this study. Drawing conclusions bring researcher to answer the research questions that stated in chapter one by determining what identified
themes stand for, by thinking about explanations for observed patterns and relationships and also by making contrasts and comparisons.

3.5 Summary

This chapter has discussed the research methodology on showing how those data are collected in to achieve the research objectives. Next chapter will discuss the findings of face to face interview, followed by the discussions of the findings.
CHAPTER 4
FINDINGS

4.0 Introduction

This chapter will present the results based on responses from the interview that had been done. The results are outcome from the use of methods in the chapter three in order to achieve the research objectives and answer the research questions as well.

4.1 Penang Port Management Team Awareness and Understanding about ASEAN Economic Community 2015

In this study, the respondent was asked about the understanding of the ASEAN, AFTA and most importantly is AEC. The questions on how far they understand including the main objectives and the implementation awareness. It showed by the answer that given from respondent 1, 2, and 3.

R1:
“I tak aware langsung tentang semua ni, so, tak boleh bagi penejelasan yang tepat...sorry...”

R2:
“...yerp, susah nak bagi penerangan tentang tu since tak melibatkan kerja.”

R3:
“I understand and tahu apa ASEAN is about...AFTA, reducing trade barriers and so on...yang baru ni objektif AEC tentang single window semua tu...”
Respond from the interview that was done with executives Penang Port Sdn Bhd, indicated that they were not fully aware and knowledgeable about AEC and its content and had limited knowledge regarding ASEAN. The respondent, R1 said that little or no interest and a general lack of awareness so that she cannot gave an exact explanation. Same with respondent R2, he said it is hard to give a further explanation since it is not related with his job. In contrast, respondent R2, he had some of the knowledge regarding ASEAN as well as AEC 2015. As R3 said, he understands and aware about ASEAN as well AEC 2015 including the objectives and implementation.

4.2 Impact of ASEAN Economic Community 2015 to Penang Port

In this study, the question related with the impact of AEC to Penang Port had been asked. The questions regarding on how does AEC related with Penang Port activities, steps Penang Port Sdn Bhd has taken to make Malaysia more attractive place for investment in terms of port capacities and infrastructure. In addition, forecast future of Penang Port performance based from the last several years performance has also been asked. Therefore, the answer given by all the respondents as stated below.

R1:
“...disebabkan i tak aware tentang AEC, tak boleh nak jawab apa yang related dengan Penang Port, tapi kami dah spend about RM 1.2 billion untuk upgrade infrastructure and superstructure untuk achieve target 1.4 million next year.”

R2:
“...yes, tu semua untuk upgrade infrastructure...”
R3:

“...macam you tahu, Penang Port role dalam facilitate movement flow of goods, services, investment and people is very important in Malaysia port industry to integrate in economic development. Macam sekarang, kami tengah undertaking some of the activities such as facilities, processes and services to make sure we are ready to capture the benefits of AEC.”

From the answers that given by the respondents, it shows that currently, Penang Port Sdn Bhd is undertaking a number of activities such as facilities, processes and services to ensure whether they are ready to capture the benefits the AEC on present. They already spend about RM 1.2 billion to upgrade infrastructure and superstructure in order to achieve their forecast 1.4 millions TEU’s handling by 2015. In this regard, Penang Port has set a target to upgrade and improve to become globally competitive port with support on an appropriate infrastructures, human capital, and regulations through the orderly and progressive implementation of various strategies.

4.3 Opportunities and Threats of ASEAN Economic Community 2015 to Penang Port

On these factors, questions that had been asked are benefits from the AEC implementation to Penang Port, how does Penang Port Sdn Bhd ensure the quality and capacity of the manpower and the challenges to Penang Port in terms of retaining it as a major port in northern area.

4.3.1 Opportunities

The answer from the respondents stated as below.
R1:

“As I am not aware, I can’t answer this question”

R2:

“Saya pon tak dapat nak jawab”

R3:

“AEC for sure bagi kebaikan to the region macam strengthen regional production chains, diffusions of new technology, increase FDI, helping raise employment juga contohnya...so, semua ni mungkin dapat mendorong Penang Port meningkatkan pertumbuhan dalam industri maritim di Malaysia...regarding manpower pula, Penang Port lagi mudah la nak dapat skill labor sebab free movement labor kan...”

According to the answer that given by R3, he agreed that AEC is already benefitting the region, strengthening regional production chains, making possible the diffusion of new technologies, stimulating foreign direct investments (FDI), and helping raise employment. Therefore, these benefitting factors should help Penang Port Sdn Bhd driven by increasing growth in the Malaysia maritime industry and will continue shaping the industry. In addition, Penang Port do not have to worry if somehow they cannot get skill labors in Malaysia because they can easily make vacant positions available to all ASEAN nationalities due to the presence of more integrated facilities in the issuance of visa and employment pass.

4.3.2 Threats

The answer from the respondents stated as below.
R1:

“Masalah yang kami ada sekarang tentang double tracking and lack of draught”.

R2:

“...sebab container handling contributed 70% Penang Port avenue...”

R3:

“Walaupun Penang Port komited dalam capital investment sebagainya, tapi, kita buat semua tu dalam berperingkat and it takes times. Macam infrastructure yang kita ada dekat NBCT, kita kena make sure mampu ke semua tu uruskan our business activities in future.”

Respond from the interview shows that there are obstacles to faced by Penang Port such as port infrastructures which are lack of draught which contribute to double tracking. Although Penang Port is committed to make capital investments to grow the business at the port, investments will be executed gradually over the years and be in tandem with business growth. Even though Penang Port has significant capacity and equipment, especially at the container terminal, they need to ensure are the infrastructure will be able to handling more business activities in future which is an AEC’s implementation. In general, containerised cargo generates about 70% of the Penang Port annual revenue with the remainder from non containerised cargo.
4.4 Penang Port Readiness to Facing ASEAN Economic Community 2015

This criteria lead to the question regarding their future plan in order to compete among the competitor, how far their readiness in terms of their financial perspective and how much Penang Port can fulfil the characteristics and elements of AEC.

The answer from the questions stated below.

R1:

“...our vision is to become premier port and logistics chain integrator in the region.”

R3:

“...open up trade in maritime transport services to create a free trade area in services in the region...we are also looking forward in future to investing in the new business activities macam roll on, roll off (Ro-Ro)...tapi tentang AEC tu i think Penang Port still has a long way on approaching deadline...”

As mention from respondent R1, Penang Port vision is to become premier port and logistics chain integrator in the region. R3 said Penang Port hopes to open up trade in maritime transport services to create a free trade area in services in the region. In addition, they are also looking forward in future to investing in the new business activities such as roll on, roll off (Ro-Ro) facilities. However, he felt that Penang Port still has a long way towards realising its AEC 2015 on approaching deadline.
4.2 Summary

This chapter overviewed about the discussion of the study regarding to reach the research objectives. These criteria contributed to the how ASEAN Economic Community 2015 related with Penang Port Sdn Bhd.
CHAPTER 5
DISCUSSION, RECOMMENDATIONS AND CONCLUSION

5.0 Introduction

This last chapter will discuss more about the finding on the previous chapter. Furthermore, this chapter also will give on the recommendation for future research and the conclusion of the study as well.

5.1 Discussion

Objective 1: To examine the level of understanding among Penang Port Sdn Bhd management team towards ASEAN Economic Community 2015.

Today there is still an alarmingly low level of awareness about AEC 2015, which largely from private sector in Malaysia. A report from the Asia Development Bank (2014) found that many companies among the ASEAN members are not even aware of the AEC blueprint. This also proved by the report in the “The ASEAN Economic Community: A Work in Progress” (2014) which shows that 55 percent of all businesses interviewed in the region still not unaware of the AEC’s ambitious plan to expunge trade barriers and reduce government regulation.

In general, it can conclude that level of understanding of AEC 15 depend with their level of position as well as how important it is in their current jobs. Therefore, the key to sustaining awareness in AEC 15 is to make Penang Port Sdn Bhd understand the big picture of ASEAN on how it really impact to them.
Objective 2: To determine the potential impact, opportunities and challenges faced by Penang Port towards the implementation of the ASEAN Economic Community 2015.

The five original member states of ASEAN have live implementation of national single windows already with planned full rollout to all significant ports by 2015. Meanwhile, AEC will open up significant opportunities for the region's maritime industry like Penang Port Sdn Bhd because trade barriers will be removing and encourage further regional growth. Therefore, this will lead to greater regional cargo movements which create opportunities for the broader maritime industry. As for now, Penang Port Sdn Bhd is currently undertaking a number of activities to ensure they are ready to capture the benefits the AEC on future. These include deploying more technology processes to improve delivery among Malaysia port services and reforming the model of cargo handling tariffs. Stated that, one of the pillars of the AEC 2015 is free flow of goods, whereby member states are to eliminate import duties and remove all forms of non-tariff barriers.

From labor perspectives, AEC will bring more prosperity for the countries and better economic advantages as a single market. By then, Penang Port do not have to worry if somehow they cannot get skill labors in Malaysia because they can easily make vacant positions available to all ASEAN nationalities due to the presence of more integrated facilities in the issuance of visa and employment pass. This will enhance the investment activities because all ASEAN nationalities who are engaged in cross border trade can travel a lot easier. As an advantage situated in a strategic location, Penang Port being a gateway port and reflects the true economic situation of a region or country.
In general, AEC 2015 challenges are to create a region wide enabling environment that facilitates growing connectivity and promotes high quality, inclusive growth. Furthermore, investment must increase to close gaps in hard and soft infrastructure and skills, and financial fragmentation must be overcome by harmonizing standards and regulations. On the other hand, ASEAN countries must also strengthen labor market and social insurance institutions in order to prepare for and better deal with the possible adverse effects of greater integration.

Before ASEAN Single Shipping Market can be established, there are many obstacles to faced by Penang Port such as port infrastructures which are lack of uniformity in areas such as cargo handling and cargo liabilities, lack of standards for qualification of personnel in shipping related services and investment. Although Penang Port is committed to make capital investments to grow the business at the port, investments will be executed gradually over the years and be in tandem with business growth. Even though Penang Port has significant capacity and equipment, especially at the container terminal, they need to ensure are the infrastructure will be able to handling more business activities in future which is an AEC’s implementation. In general, containerised cargo generates about 70% of the Penang Port annual revenue with the remainder from non containerised cargo. Currently, the largest vessels that call the port have a capacity of approximately 4500 twenty-foot equivalent units (TEUs).

Penang Port currently has the capacity of two million TEUs and currently handles around the tune of just above a million TEUs per annum. Being a regional port, their cargo mostly comes from the hinterland up to southern Thailand which is about
40% terminal’s volumes. Apart from that, they planning to increase it with better rail efficiency to further accelerate the improvements in operational efficiency and grow the business activities at the port so that the port can achieve higher growth and achieve its potential and be recognised internationally as a major regional port. However, before they invest in more capacity and equipment adding that they also plan to further improve the capacity and efficiency of conventional cargo operations, namely in the dry bulk and liquid bulk cargo sectors. Because the infrastructure may still remain a main challenge to Penang Port Sdn Bhd, their main problems are double tracking and lack of draught. Therefore, in support to the growing automotive industry, they are also looking forward in future to investing in the new business activities such as roll on, roll off (Ro-Ro) facilities to facilitate the export of vehicles. Even though by eliminating non tariff barriers or promoting the greater mobility of skilled workers are one of the steps to realizing the AEC, but they are also ones that will be fiercely resisted by Penang Port because it could give a problem on the large majority of people, unless more effective wage setting institutions are created.

**Objective 3: To analyse the readiness of Penang Port Sdn Bhd in dealing with the impact of ASEAN Economic Community 2015.**

AEC supposedly had a 2020 deadline on the first sketched in 2003 but later, in 2007, it was amended to 2015. However, most of the ASEAN leaders assume the due date should not be viewed as a target but considered it as a first step of measures towards the end goal of a fully integrated economic community. Meanwhile, Datuk Seri Mustapa Mohamed (Malaysian International Trade and Industry Minister) said 2015 is just the semi completion of the AEC 2015. He also informed that although Malaysia will assume
the chairman role for the community in January 2015, the heavy duties will only start in November this year.

Penang Port still has a long way towards realising its AEC 2015 on approaching deadline. Indeed, many of their employees seem almost preoccupied, somewhat prematurely, confirming this to the reality. Moreover, the awareness reveals that their knowledge of AEC seems to general make it more difficult to reform the agenda. Even if they were ready to pick up now, the real test on the AEC 2015 for them will lie in the years beyond 2015. Hence, Penang Port has to capitalise on their potential growth in seaborne trade to become more integrated with the establishment of the AEC 2015 by deadline.

5.2 Research Implication

Regarding on the result and discussion, Penang Port should be more proactively manage and facilitate awareness program regarding ASEAN. They may have appropriate programmes to increase the level of awareness among their employees on AEC. This is because, from the results, it shows that they mostly have little knowledge and not aware it really gave an impact to them. Means, they do not only investing in infrastructure or implementing new policies but it also means they need to improve their knowledge by investing in better training so that employees skills and knowledge match with those ASEAN benchmarks. Hence, as a government, The International Trade and Industry Ministry of Malaysia (MITI) also needs to enhance its engagement programs with the public on the much anticipated AEC. Furthermore, perhaps there will more events would
be organized to increase awareness among Malaysians of the benefits of AEC to the country and ASEAN. As for now, they have organised a few engagements involving students from schools and universities, and also lecturers including conducted a similar programmed with the civil society.

5.3 Limitations of the Research

There are some limitation on this research which are Penang Port does not have someone that specialized and really aware about AEC 2015. Therefore, some of the questions regarding AEC 2015 cannot be answered specifically. In addition, the interview that had been done is not included top management in every department. There are only representatives from some of the department from Penang Port Sdn Bhd. In addition, there are three respondents from this interview; however, only two respondents were used for data analysis because the second respondent (R2) did not provide the appropriate answer to the questions.

5.4 Recommendations for future research

Regarding on the result and discussions; it shows that this study is only focus on three criteria such as awareness, potential impact, opportunities, challenges and readiness of Penang Port Sdn Bhd to AEC 2015. Therefore, in future research can study other criteria that related with AEC 2015. On the other hand, it shows that this study only focus to port industry which is Penang Port Sdn Bhd on AEC 2015. Therefore, in future research may focus in other industry including government and private sector.
5.5 Conclusion

This research has explored on how AEC 2015 plays their role to port industry in Malaysia especially Penang Port Sdn Bhd and how the key characteristics of AEC can be effected to Penang Port Sdn Bhd. In order to answer those research objectives as point out above, this study was conduct.

ASEAN has now focused its attention on the implementation of remaining deliverables under the AEC. AEC 2015 is significantly promoting intra ASEAN trade and investment while strengthening the economies to attract foreign direct investment in promoting regional and global integration of businesses. Therefore, as a service sector in the ASEAN Economies, Penang Port should be prepared for the shift towards to increase efficiency and capacity within ASEAN challenges. In future, may be with appropriate strategies during changing environment, the port industry can benefit from this AEC 2015.
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