

ERIA Discussion Paper Series**Thailand Country Study
ASEAN Economic Community
Blueprint Mid-term Review Project**

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Abstract: *The main objectives of this study are to determine progress in the implementation of the key Association of Southeast Asian Nations (ASEAN) Economic Community (AEC) measures compared to the first monitoring effort in 2010–2011, and to compare the gap between the liberalisation rate in terms of commitments and in terms of actual policies. This study also examines the implementation bottlenecks and generates recommendations from stakeholders (such as the business sector, academia, and government) to address the key bottlenecks and move forward the implementation of the AEC measures into 2015 and beyond (2016–2025). In addition, in view of the importance of the private sector for the successful realisation and deepening of the AEC in 2015 and beyond, this study explores greater partnership with or engagement of the private sector by conducting both intensive consultations and interviews with key informants in the private sector.*

The AEC measures of interest in this study are services liberalisation, non-tariff measures (NTM), trade facilitation, investment liberalisation, mutual recognition arrangements (MRA) on professional services, and standards and conformance.

Keywords: Thailand, AEC, service liberalisation, non-tariff measure, trade facilitation, investment liberalisation, mutual recognition arrangements on professional services, standards and conformance

JEL Classification: F13, F15

1. Services Liberalisation

The services sector plays an important role in the Thai economy in terms of its direct contribution to gross domestic product (GDP) and employment. In addition, some services, such as telecommunications, banking, insurance, and maritime, indirectly contribute to the economy as intermediate inputs to other sectors, including the production sector. If the services sector is more productive and can provide lower cost, then the production cost of other sectors is also lower.

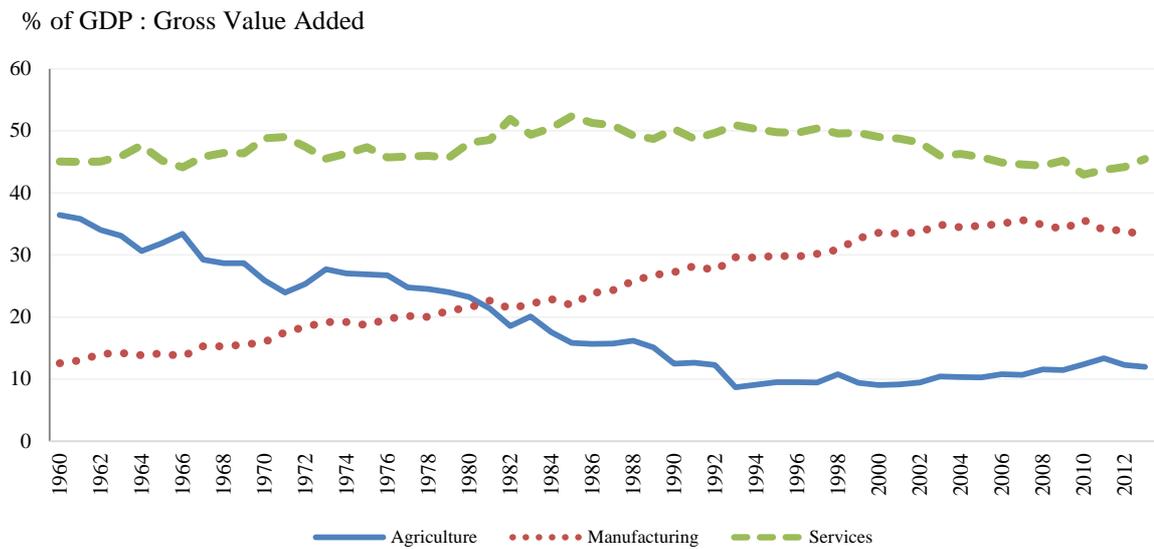
However, some service industries in Thailand are not productive due to a lack of competition. Opening up these markets to competition could allow consumers to have more variety and better quality of services, and lower prices.

In this chapter, we give an overview of the services sector in Thailand. We also update the current state of liberalisation in the services sector and provide key bottlenecks and recommendations toward the implementation of services liberalisation. The service industries in this study include banking, insurance, health services, medical professionals, tourism, telecommunications, and maritime.

1.1. Contribution of services sector to Thai economy

The services sector has contributed to the Thai economy by generating 49–57 percent of GDP during 1993–2011 (Figure 1). Its contribution to GDP, however, has continuously reduced and reached the lowest point of 48.7 percent in 2010. The share of employment in the services sector has increased significantly from about 32 percent of total employment in 2000 to 41 percent in 2011 (Figure 2).

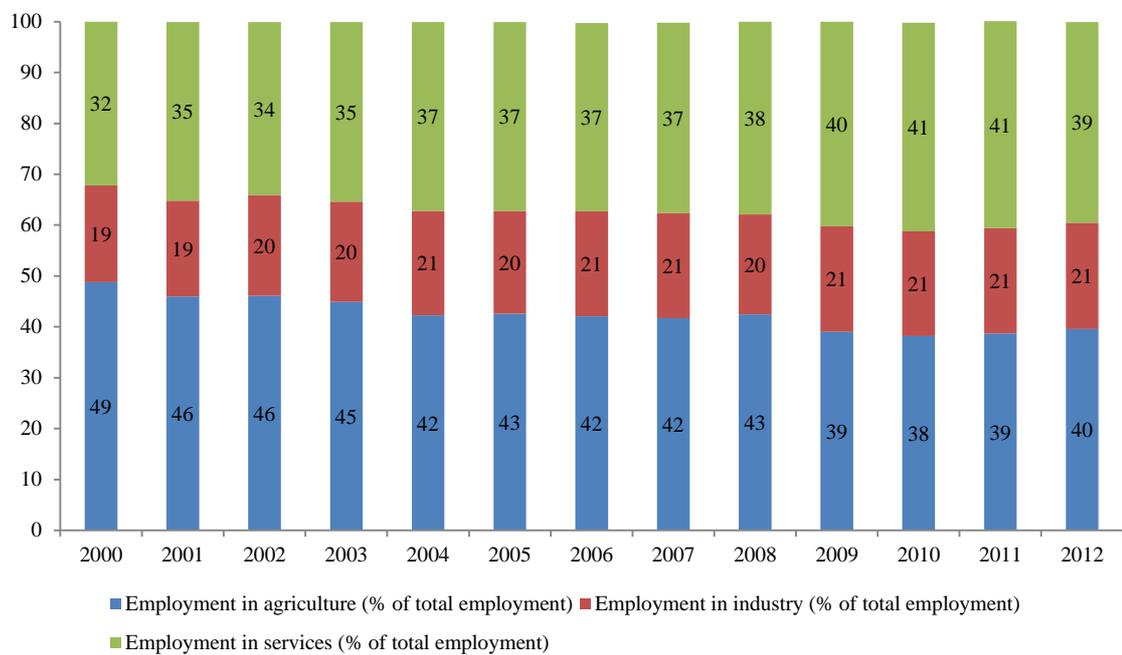
Figure 1: Sectoral contribution to GDP



Note :GDP = gross domestic product.

Source: World Development Indicators (Accessed from <http://databank.worldbank.org/>).

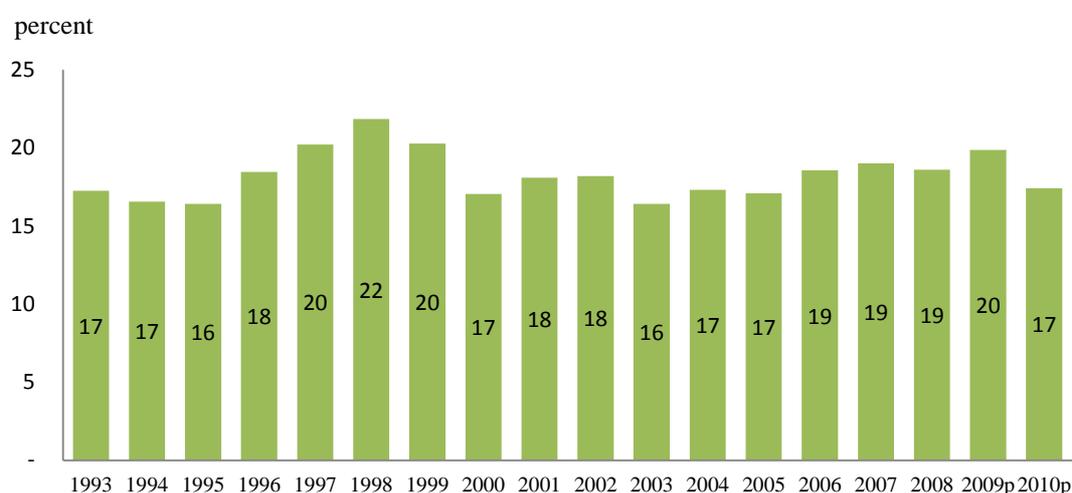
Figure 2: Sectoral contribution to employment



Source: World Development Indicators (Accessed from <http://databank.worldbank.org/>).

In terms of trade, the services trade accounted for 16–22 percent of total trade during 1993–2010 (Figure 3).

Figure 3: Share of services trade to total trade

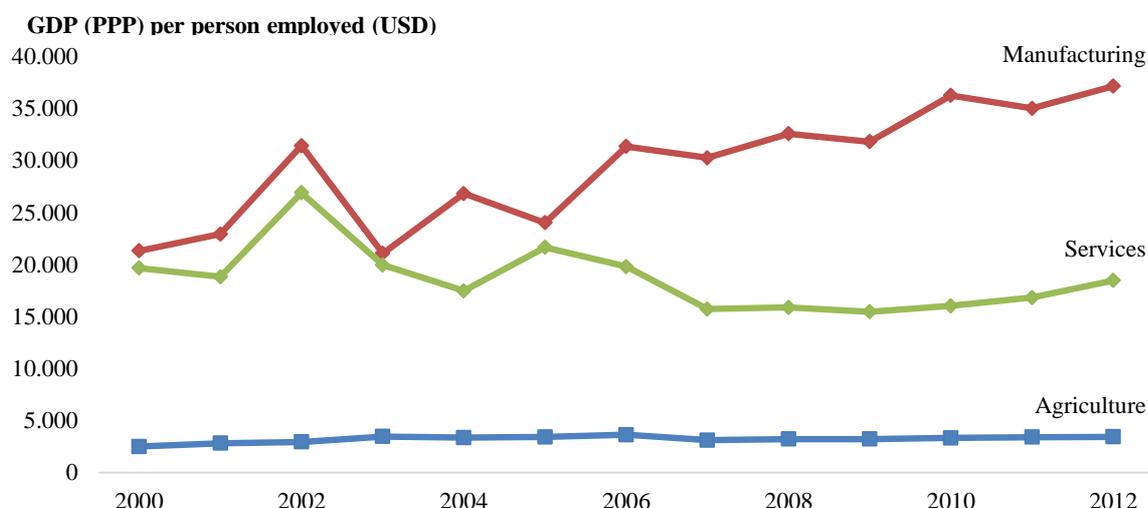


Source: National Economic and Social Development Board (Accessed from http://www.nesdb.go.th/Portals/0/eco_datas/account/ni/cvm/2013/Tab.GDP-CVM2013.xls).

1.2. Labour productivity of services sector

The growth and level of labour productivity of the services sector are not impressive. Figure 4 shows Thailand’s labour productivity, measured as the value added per worker, in major sectors during 2000–2012. The trend of labour productivity in the services sector has decreased, while that in the manufacturing sector has significantly increased, and that in agricultural sector has slightly improved. Furthermore, compared with other ASEAN countries, labour productivity of the services sector in Thailand is lower than that in Singapore by more than fivefold, and in Malaysia by about twofold (Figure 5).

Figure 4: Thailand's labour productivity by economic sectors



Note :PPP = purchasing power parity.

Source: IMD World Competitiveness Yearbook (various years).

Figure 5: Labour productivity in services sector by countries (2012)



Note :PPP = purchasing power parity.

Source: IMD World Competitiveness Yearbook (2013).

1.3. Services liberalisation under free trade agreements

Thailand has signed a number of bilateral and regional free trade agreements (FTAs) that contain provisions on liberalisation of trade in services such as the Japan–Thailand Economic Partnership Agreement (JTEPA), the ASEAN–China Free Trade Area (ACFTA), and the ASEAN–Korea Free Trade Area (AKFTA). The fact

that the liberalised sectors differ among the concluded FTAs reflects that Thailand has yet to formulate a coherent national strategy to develop the services sector. In addition, complicated and different barriers of services trade in existing FTAs cause difficulties for government officials and related agencies in implementing the commitments.

Thailand's commitments to liberalise its services sector are not beyond the extent of existing domestic laws and regulations, except for certain specific cases. For example, under the JTEPA, Thailand allows Japanese investors to hold up to 100 percent ownership in general consulting services, and up to 60 percent in major hotels and restaurants, while normally the maximum foreign equity limit held is below 50 percent under domestic law.

1.4. Services liberalisation under the ASEAN Economic Community

For services liberalisation, the AEC Blueprint relies on the ASEAN Framework Agreement on Services (AFAS) as a mechanism for liberalisation. To facilitate the free flow of services by 2015, there will be substantially no restriction to ASEAN suppliers in providing services and in establishing companies across national borders within the region, subject to domestic regulations.

In particular, the services trade liberalisation under the AFAS focuses on the following priority actions.

Firstly, remove substantially all restrictions on trade in services.

- Four priority services sectors by 2010: air transport, e-ASEAN, healthcare, and tourism
- One priority services sector by 2013: logistics services
- All other services sectors by 2015

Secondly, there should be no restrictions for Mode 1 (cross-border trade) and Mode 2 (consumption abroad), with exceptions due to valid regulatory reasons.

Thirdly, allow for ASEAN equity participation. ASEAN investors can hold at least 70 percent of shares in a service business. Currently, five sectors, air transportation, information and communication technology (ICT), healthcare, tourism, and logistics, are set as priority areas for liberalisation (Table 1).

Finally, remove progressively other Mode 3 (commercial presence) market access limitations by 2015, as endorsed by the ASEAN Economic Ministers (AEM).

Table 1: Share of ownership allowed for ASEAN investors

Services Sector	Before 2008	Before 2010	Before 2013	Before 2015
Four priority sectors	At least 51%	At least 70%		
Logistics	At least 49%	At least 51%	At least 70%	
Others	At least 49%	At least 51%		At least 70%

Source: ASEAN Economic Community Blueprint (2008) (Accessed from <http://www.asean.org/archive/5187-10.pdf>).

However, services liberalisation under the AEC is flexible in terms of timeframe and the sectors offered for liberalisation. For telecommunication services, for example Thailand has so far offered to liberalise only services related to telegraph, teletype, teletext, and facsimiles, while important services like mobile telephony, high-speed internet services, and satellite services have never been subject to liberalisation under the World Trade Organization (WTO) and ASEAN. There is also no commitment to address behind-the-border issues, such as, interconnection for telecommunication services, to create effective competitive markets.

1.5. Current situation of liberalisation in the banking sector

Cross-border capital flows are partly restricted. In particular, there are no restrictions on inflows, but there are still some capital control measures for short-term and long-term outflows. Under the Exchange Control Act imposed prior to 2012, capital outflows were prohibited unless they were under the categories allowed by the regulations under the Act. However, since 2012, the Bank of Thailand has liberalised capital movements according to the master plan for capital account liberalisation.

This section describes current restrictions on the banking sector in Thailand in terms of market access, ownership, and regulation.

1.5.1. Market access

Regarding Mode 3 (commercial presence), in 2010, domestic and foreign financial institutions must obtain licences from the Ministry of Finance to operate in Thailand. These licences were granted to apply periodically, depending on economic

needs and the financial conditions in Thailand. More recently, the permission for licences for new foreign commercial banks to operate is in accordance with the Financial Sector Master Plan Phase II B.E. 2553-2557.¹ In 2013, the Minister of Finance endorsed the Notification of Ministry of Finance Re: Rules, Procedures, and Conditions for the Establishment of New Foreign Commercial Bank's Subsidiary, whereby foreign commercial banks that meet the specified qualifications may submit an application for the establishment of a subsidiary to the Bank of Thailand during the second half of 2013. The application review process was completed by the middle of 2014. Consequently, new licences were approved for the ANZ Banking Group and Sumitomo Mitsui Trust Bank.

Although, no economic needs tests are applied to new players, under the Notification, some key provisions for the establishment of a new foreign commercial bank's subsidiary are:

First, new foreign commercial banks shall be incorporated in Thailand as a subsidiary, which is permitted to open up to 20 branches and 20 off-premise automated teller machines (ATMs).

Second, the newly incorporated subsidiary must have paid-up registered capital of no less than THB 20,000 million.

Third, an applicant must be a reputable foreign commercial bank with expertise, strong performance, a sound risk management system, as well as good governance.

Finally, an applicant must be a foreign commercial bank whose country of origin has significant business relations with Thailand in the areas of finance, trade, and investment, or whose country of origin has a free trade agreement with Thailand or allows Thai commercial banks to operate at a similar level as commercial banks of that country.

¹ The Notification of Ministry of Finance Re: Rules, Procedures, and Conditions for the Establishment of New Foreign Commercial Bank's Subsidiary (<http://www2.bot.or.th/fipcs/Documents/FPG/2556/engPDF/25560155.pdf>) and the Notification of the Bank of Thailand No. SorNorSor. 6 /2556 Re: Guidelines and Conditions for Establishing a Branch and Undertaking the Business of a Branch of Foreign Commercial Bank's Subsidiary (<http://www2.bot.or.th/fipcs/Documents/FPG/2556/engPDF/25560156.pdf>)

Regarding the legal forms of establishment, foreign-invested banks are allowed to establish subsidiaries, branches (only lending against local capital, but not parent capital), and representative offices.

The prudential restrictions on the ability of domestic and foreign-invested banks to raise funds were applied in 2010. Currently, there is however no such restriction.

Similarly, the restrictions on the ability of domestic or foreign-invested banks to lend have been eliminated, except for lending subject to prudential restrictions. However, additional lending restrictions may still apply when it is deemed necessary to ensure a safe and sound financial system and to strengthen macroeconomic stability.

In terms of the scope of services, there is no discrepancy between domestic and foreign-invested banks. Both are permitted to provide all clearing and settlement services, all foreign exchange services, and some securities services, but not a real estate business. For insurance and securities services, banks are subject to approval by lead regulators.

Some restrictions on expanding operations are applied to foreign banks, but there are no restrictions to domestic banks. In particular, foreign banks are permitted to expand the number of outlets only limited in number (not in location), depending on the type of licences.

Regarding Mode 1 (cross-border trade) where the foreign-invested bank is located abroad and services are provided electronically, banking services can only be performed by banks with relevant licences. That is, foreign banks located abroad are not permitted to lend or raise funds in Thailand. They are also not permitted to provide cross-border clearing and settlement services, securities business, foreign exchange business, and insurance.

Unlike Mode 1, for Mode 2 (consumption abroad), a resident or national of Thailand who is temporarily abroad can purchase financial services while abroad with no restrictions.

Concerning Mode 4 (movement of natural persons) where foreign personnel are employed in locally established foreign banks, there is a nationality requirement for members of the board of directors. In particular, at least half of the members of the board of directors must be of Thai nationality.

1.5.2. Ownership

Foreign ownership of banks is allowed for existing banks (through merger or acquisition) as well as for new entrants (greenfield operations). For existing banks, the maximum foreign equity permitted is up to 100 percent, depending on a possibility of tender offer from existing shareholders. For greenfield operations, new foreign banks are permitted to operate in Thailand in the form of subsidiaries with a minimum 95 percent of total shares.

1.5.3. Regulations

To operate a banking service business in Thailand, the number of licences is limited and licences are allocated through discretionary decision by issuing authorities (the Bank of Thailand and the Minister of Finance). In terms of licencing requirements, foreign firms are not subject to different requirements from domestic firms. In terms of interest rates and interest gaps between lending and borrowing rates, they are usually based on market-based mechanisms.

1.6. Current situation of liberalisation in insurance sector

Similar to the banking sector, in terms of macroeconomic policies, cross-border capital flows in the insurance sector are partly restricted. In particular, there are no restrictions on inflows, but there are still some capital control measures for short-term and long-term outflows.

This section provides current restrictions on the insurance sector in Thailand in terms of market access, ownership, and regulation (summarised in Table 2).

1.6.1. Market access

Regarding Mode 3 (commercial presence), there are policy restrictions on new entry of both domestic non-government and foreign-invested insurance providers. Specifically, the entry of insurance providers may be undertaken only by a public limited company under the law on public limited companies, and with a licence from the Minister and an approval of the Cabinet, according to Section 7 of the Life Insurance Act 1992 (amended 2008) and Section 6 of the Non-life Insurance Act 1992 (amended 2008). Other than licensing requirements, domestic and foreign-invested providers are required to show economic benefit.

In terms of legal forms of establishment, foreign-invested insurance providers are allowed to establish subsidiaries and branches.² Their branch offices are required to maintain asset in Thailand in accordance with amounts, types, rules, and conditions prescribed by the Commission in the notifications³. Further, foreign insurance providers are required to establish joint ventures with local firms with limited ownership participation⁴.

Regarding restrictions on reinsurance, both domestic and foreign-invested insurance companies can reinsure with a resident reinsurance company in an appropriate amount by considering mainly risk management through the reinsurance, according to the Notification of the OIC about rules, procedures, and conditions for reinsurance of Non-life (Life) insurance 2012 under the Non-life (Life) Insurance

² Concerning subsidiaries, Section 13 of the Non-life Insurance Act 1992 (amended 2008) and Section 14 of the Life Insurance Act 1992 (amended 2008) allow a transfer of business, either in whole or in part, or a company amalgamation. For branches, Section 7 of the Non-life Insurance Act 1992 (amended 2008) and Section 8 of the Life Insurance Act 1992 (amended 2008) allow a foreign-invested insurance company to establish a branch office for the undertaking of the insurance business under these acts after obtaining a licence from the Minister with the approval of the Cabinet.

³ Later, the Commission announced the Notification of Insurance Commission Subject: Designation of Amount, Types, Procedures, and Conditions on Asset Maintenance in Thailand of the Branch Office of the Foreign Life Insurance Company B.E. 2551. Under Clause 5 of this Notification, assets maintained in Thailand shall be in types, procedures and conditions as follows: (1) Cash placed with the Registrar, (2) Treasury bond of the Ministry of Finance, (3) Thai Government bond or Bank of Thailand Bond, (4) Cash deposit in fix deposit account with bank or cash deposit with financial company, (5) Bill of exchange or promissory note with bank or financial company as issuer or payer, (6) Ministry of Finance guaranteed bond or debenture of organization or state enterprise (7) Immovable property for being the place to operate the business or for welfare of officer or employee of the company which its value is not more than 40% of assets maintained in Thailand.

⁴ Under Section 9 of the Non-life Insurance Act 1992 (amended 2008) and Section 10 of the Life Insurance Act 1992 (amended 2008), both life and non-life insurance companies must have directors who are Thai in a number that is not less than 3/4 of all directors, and must have persons as stipulated under (1) or (2), or (1) and (2) below, holding its shares in an aggregate proportion of more than 75% of the total number of its voting shares that have been sold:

(1) Thai individuals, or non-registered ordinary partnership, in which all partners are Thai nationals;

(2) juristic person registered in Thailand and possessing the following characteristics:

(a) having the persons under (1) holding its shares in excess of 50% of the total number of its voting shares that have been sold, or

(b) having the persons under (1), or the juristic persons under (2) (a), or the persons under (1) and the juristic persons under (2) (a), holding its shares in excess 50% of the total number of its voting shares that have been sold. Hence, foreigners are permitted to own only 25%.

However, the maximum equity permitted may be relaxed to 49% (with the non-Thai members of board can be more than 25% but less than half) in the event that the Office of Insurance Commission deems it appropriate.

Act 1992 (amended 2008). Furthermore, financial reinsurance or finite reinsurance is prohibited under this Notification.

There are also restrictions applying to the placement of assets by resident insurance companies. Specially, both domestic and foreign-invested insurance companies are restricted in the amount of assets that can be held abroad. In 2004, the Ministry of Commerce stipulated the types of instruments and amount of investment allowed inside and outside Thailand. For example, any insurance company can invest in debenture bonds of the juristic person established under the ASEAN agreement together with the amount not higher than 10 percent of the total assets of the company. Furthermore, insurance companies may invest only in businesses prescribed by the OIC in the notifications.

In addition, according to Section 19 of the Non-life Insurance Act 1992 (amended 2008) and Section 20 of the Life Insurance Act 1992 (amended 2008), a company shall place the securities with the registrar, as a security deposit, in the value and the category of insurance prescribed by the registrar in the ministerial regulations. The security may be cash, Thai government bonds, or other assets, as prescribed by the Notification of the Ministry of Commerce. However, a company may ask for permission to change this security deposit.

There are restrictions for both domestic and foreign invested insurance companies to expand operations such as branches or offices. For domestic insurance companies, expansion of outlets is subject to non-prudential approval, while for foreign-invested insurance companies, one insurance outlet with no new outlets is permitted.⁵

⁵ According to Section 17 of the Life Insurance Act 1992 (amended 2008), the Company which will open branch office or change the location of its head office or branch office shall obtain permission from insurance commissioners, and granting this permission shall be in accordance with rule, procedures, and condition as prescribed by the Minister.

Under Section 7 of the Non-life Insurance Act 1992 (amended 2008) and Section 8 of the Life Insurance Act 1992 (amended 2008), foreign-invested insurance company may establish a branch office for the undertaking of the life (non-life) insurance business under these acts after obtaining a licence from the Minister with the approval of the Cabinet.

A branch office of the foreign non-life insurance company obtained a licence to engaged in non-life insurance business shall maintain assets in Thailand as prescribed by the Commission in the Notifications. However, a company which is the branch office of a foreign non-life insurance company cannot open a branch office anywhere.

Regarding Mode 1 (cross-border trade) where a foreign invested insurance company is located abroad, and services are provided electronically, domestic residents can purchase insurance cross-border from a foreign-located insurance company. Offshore insurance firms are allowed to solicit business through advertising in Thailand.⁶

Similar to Mode 1, in Mode 2 (consumption abroad), domestic residents can purchase insurance from a foreign insurance company while abroad.

In Mode 4 (movement of natural persons), there are residency or nationality requirements for personnel employed by locally established foreign-invested insurance companies. At least 75 percent of members of the board of directors must be Thai⁷ and more than 75 percent of the total number of the voting shares must also be held by Thai individuals or juristic persons. Furthermore, insurance agents or brokers must obtain a licence from the registrar, and an applicant for an insurance agent's licence shall be domiciled in Thailand.⁸

A branch office in these acts shall include an office that is separated from a company's head office and that receives its expenditures from the company, either directly or indirectly. A location, used as an information-operating unit, a document-keeping place, and a training place, in relation to company business are excluded from these acts.

From the notification of the Office of Insurance Commission (OIC) in 2008 under the life insurance and non-life insurance acts, an insurance company wanting to open a new branch must get approval from the OIC. The new branch is required to provide at minimum basic services listed by the OIC. A company, which is a foreign branch, is not allowed to open a sub-branch office.

⁶ Under Section 30 of the Non-life Insurance Act 1992 (amended 2008) and Section 33 of the Life Insurance Act 1992 (amended 2008), a company is not allowed to advertise its non-life (life) insurance business in a false or exaggerated manner.

⁷ According to Section 9 (10) of the Non-Life (Life) Insurance Act 1992 (amended 2008).

⁸ According to Section 63 and 64 (68 and 69) of the Non-life (Life) Insurance Act 1992 (amended 2008), a non-life (life) insurance agent or broker must obtain a licence from the Registrar. An applicant for an insurance agent's licence shall be domiciled in Thailand and have these qualifications:

- (1) be sui juris
- (2) not be adjudged incompetent or quasi incompetent
- (3) never have been sentenced to imprisonment upon final judgment
- (4) not be bankrupt
- (5) not be an insurance broker
- (6) not have had an insurance agent's or broker's licence revoked within the 5 years prior to the application date
- (7) have studied the non-life (life) insurance business at an institute prescribed by the Registrar, or have passed an examination concerning non-life insurance knowledge, in accordance with the subjects and procedures prescribed by the Registrar in the notification.

In terms of restrictions on permitted length of stay, foreign insurance personnel are permitted for 90 days for short-term visits, and foreign intra-corporate transferees are permitted for 1 year for long-term stays. To be eligible to work in Thailand, a foreigner needs to get a visa and a work permit.⁹ Usually, a non-immigrant visa is required to apply for a work permit. After getting a visa, a foreigner may apply for a work permit¹⁰.

Table 2.2: Restrictions on establishment of insurance services

Item	Restrictions of Life and Non-Life Insurance
Restriction on new entries <ul style="list-style-type: none"> • licensing • needs test 	<ul style="list-style-type: none"> - In order to engage in the insurance business, new firms, both non-government and foreign-invested insurance providers, might have to establish as a public limited company under the law on public limited companies; including a license from the Minister, and the approval of the Cabinet, according to section 7 of the Life Insurance Act 1992 and section 6 of the Non-life Insurance Act 1992. Hence, the licensing is also subject to the government's policy. - New entry of non-life insurance broking providers should also establish as a public limited company, a company limited, or a financial institution, according to the notification of the OIC about measures and requirement for non-life insurance broker licensing in 2011. - Both domestic and foreign-invested providers must show economic benefit for needs test requirements.
Legal forms of establishment allowed for foreign-invested insurance providers	<ul style="list-style-type: none"> - Foreign-invested providers for every type of insurance can establish as subsidiaries and branches.
Maximum ownership applied for foreign-invested insurance providers	<ul style="list-style-type: none"> - According to the Life Insurance Act 1992 (amended 2008) and the Non-life Insurance Act 1992 (amended 2008), foreign-invested providers are implied from these acts to be established as a joint venture with local firms. - The maximum equity permitted is 25% (with less than 25% of non-Thai members of board), however, it could

⁹ There are three types of visa: (1) business visa (valid for 1 year), (2) expert visa (issued for foreign experts) (valid for 1 year), and (3) investment promotion visa (issued under the Broad of Investment Promotion law) (valid for 2 years).

¹⁰ There are three types of work permit: (1) a temporary work permit allowing foreigners to work in Thailand for no more than 1 year, (2) a work permit issued under the Board of Investment Promotion law or the Industrial Estate law allowing foreigners to work for more than 2 years, and (3) a permanent work permit only issued to a permanent resident.

Item	Restrictions of Life and Non-Life Insurance
	be relaxed to 49% (non-Thai members of board can be 25–50%) if the OIC deems it appropriate.
Types of provided services <ul style="list-style-type: none"> • domestic/foreign providers • any monopoly provisions 	<ul style="list-style-type: none"> - Both domestic and foreign-invested providers are allowed to provide insurance and insurance broking services to domestic clients. - Every type of insurance service is not subject to monopoly provisions.

Note :OIC = Office of Insurance Commission.

Source: Collated by authors (2014).

1.6.2. Ownership

Private owners are allowed to provide insurance services for both existing providers (through merger or acquisition) and new entrants (greenfield operations) with 100 percent maximum private equity permitted. However, foreign ownership in the provision of insurance service for both existing providers and new entrants is allowed with only 25 percent maximum foreign equity permitted.¹¹ However, the OIC may permit persons of non-Thai nationality to hold shares, in a proportion of up to 49 percent of the total number of voting shares that have been sold.

1.6.3.Registration, authorisation, and licensing

The number of licences is limited and licenses are allocated by discretionary decision by the issuing authority. Under Section 6 (7) of the Non-life (Life) Insurance Act 1992 (amended 2008), the applications for a licence shall be in accordance with the rules, procedures, and conditions prescribed in the ministerial

¹¹ Under section 6 of the Non-life Insurance Act 1992 amended 2008 and section 10 of the Life Insurance Act 1992 amended 2008, both life and non-life insurance companies must have directors who are Thai in a number that is not less than three quarters of all directors, and must have persons as stipulated under (1) or (2), or (1) and (2) below, holding its shares in an aggregate proportion of more than 75 percent of the total number of its voting shares that have been sold:

- (1) Thai individuals, or non-registered ordinary partnership, in which all partners are Thai nationals;
- (2) juristic person registered in Thailand and possessing the following characteristics: (a) having the persons under (1) holding its shares in excess of 50% of the total number of its voting shares that have been sold, or (b) having the persons under (1), or the juristic persons under (2) (a), or the persons under (1) and the juristic persons under (2) (a), holding its shares in excess 50% of the total number of its voting shares that have been sold.

Hence, maximum ownership of foreign providers is permitted at 25% of the total number of the voting shares that have been sold.

However, if the Commission deems appropriate, it may permit persons of non-Thai nationality to hold shares, in a proportion of up to 49% of the total number of voting shares that have been sold, and permit persons of non-Thai nationality to serve as directors, in an amount exceeding 1/4, but less than 1/2, of the total number of directors. In granting such permission, the rules regarding shareholding by persons under the first paragraph shall apply.

regulations. The ministers may also prescribe various conditions in the license. However, foreign and domestic firms are not subject to different licensing requirements.

In terms of pricing, both domestic and foreign insurance companies need government approval for the prices of their products. Based on Section 30 of Life Insurance Act 1992 (amended 2008) and the Non-life Insurance Act 1992 (amended 2008), the premium rates prescribed by insurance companies shall be approved by the registrar. The registrar may, in his discretion or upon application by the company, order such rate changed.

1.7. Current situation of liberalisation in health services

This section provides current restrictions on the health services sector in Thailand in terms of market access, ownership, and regulation.

1.7.1. Market access

Regarding Mode 3 (commercial presence), the practice for joint ventures of foreign health service firms follows the Foreign Business Act B.E. 2542. Since foreign medical and health services are restricted as included in (21) of Annex 3 of the act, foreign health service firms cannot be established with foreign ownership of more than 49 percent (unless they get permission from the relevant government agencies). At this moment, hospital services, except inpatient services, medical laboratories for x-ray, ultrasounds, magnetic resonance imaging (MRI), and ambulance services are allowed to have foreign equity participation which do not exceed 70 percent of the registered capital and only operate through a joint venture with a juridical person of Thai nationality as provided by the eighth package of the AFAS. Despite the contradiction with national law, the commitment of the international agreement will overrule any domestic law under the Thai Constitution. However, no foreign firms participate in more than 49 percent of the registered capital. Only the restriction of business establishment for hospital services is harmonised with the Foreign Business Act B.E. 2542. Therefore, the current restriction on the maximum ownership is different from 2010.

Other than restrictions on Mode 3, there are also restrictions on Mode 4 (movement of natural persons) in health services. In general, the order of the Royal

Thai Police states the ratio of foreigner to Thai employed in any business (including health services) should not exceed 1 to 4. Therefore, the minimum requirement for having Thai nationals or permanent residents is applied in every position in hospital services, medical laboratories, and ambulance services. The specific requirements in each type of health service are as follows.

Hospital services

According to the Sanatorium Act B.E. 2541, a person engaging in a sanatorium business in Thailand must obtain a licence from the Ministry of Public Health and must be a permanent resident to obtain the licence. Doctors and nurses are required to obtain licences to practice in Thailand, while any person responsible for operating a hospital, except inpatient services or the manager, is required to have a licence to operate not more than one hospital, and must obtain a licence to practice medicine in Thailand. Moreover, a person who applies for a licence to operate must be domiciled in Thailand. The board of directors, including administrative and executive positions, or alike in legal entity must be Thai nationals and have permanent domicile in Thailand. However, this limitation is for locally licenced managerial persons for inpatient services.

Medical laboratories

Locally trained professionals can be employed in a foreign-invested professional service firm. In addition, according to Sections 3 and 8 of the Medical Technology Professions Act B.E. 2547 (2004), all professionals (medical laboratory scientists) must be registered and licenced by the Medical Technology Council.

According to Section 28 of the act, those who are not medical laboratory scientists by law cannot provide services. However, para-professionals are allowed to provide services under the control of medical laboratory scientists. In addition, most management positions do not require a professional licence in medical laboratory science.

Ambulance services

According to the Emergency Medical Act B.E. 2551, operators of emergency medical service ambulances need to have a medical operator certificate, be trained and registered in the emergency medical services (EMS) systems for each area, and have a driver's licence for vehicles used in EMS operations.

Since the commitment under the AFAS is unbound for presence of natural persons or Mode 4 of supply services, the employment of foreign-invested firms has to follow national laws and regulations.

1.7.2. Ownership

Foreign ownership in health service firms is allowed for existing operators and new entrants with 49 percent maximum foreign equity. In particular, legal entity, which is owned by foreigner(s), must meet the requirements as stipulated by the Alien Business Act. However, for ASEAN investors in hospital services (other than inpatient services), maximum foreign equity is permitted up to 70 percent.

1.7.3. Regulations

For quality assurance restrictions, the licensee shall provide a competent official for the regular supervision of the qualifications of the sanatorium and the operations of the sanatorium business or the Bureau of Sanatorium and Art of Healing, under the Sanatorium Act B.E. 2541. Therefore, both domestic and foreign hospital services need to be accredited or approved for standard performance or quality assurance. For medical laboratories, both domestic and foreign service providers need to be accredited according to ISO 15189 by the Bureau of Laboratory Quality Standards. Furthermore, EMS ambulance has to oblige for quality assurance and be assured and permitted by relevant authorities, according to the order of Standard and Rules for EMS system following the Emergency Medical Act B.E. 2551.

1.8. Current situation of liberalisation on medical professionals

This section provides current restrictions on medical professionals in Thailand in terms of market access, and regulation on licencing and operation.

1.8.1. Market access

Restrictions on market access of medical professionals exist in Modes 3 and 4, but not in Modes 1 and 2. Regarding restrictions on the commercial presence (Mode 3) of professional service firms and/or partnerships in Thailand, the number of new entries of either domestic or foreign-invested medical firms or partnerships is not restricted in each profession. However, there are some differences between each medical profession with respect to incorporation. Doctors' service firms are required

to establish in the form of a partnership, while the incorporation for dental and para-medical services is not confined. Foreign doctors' service firms are also required to establish a joint venture, with an equity limit of 70 percent.

Therefore, foreign and non-professional investors' ownership is allowed in all medical service firms. The equity stake allowed for non-professional investors, whether they are existing operators or new entrants, is 100 percent. Nevertheless, the maximum equity permitted for foreigners and non-professional investors in a doctors' service firm is 49 percent.

Concerning Mode 4 (movement of natural persons), for inward movement of individual professionals), the number of new medical professionals' entries by domestic or foreign individuals is not limited. However, there is a nationality requirement for individual professionals to qualify or to practice in Thailand. That is, medical professionals must have Thai nationality. Only professionals from ASEAN countries are allowed to practice in Thailand if they are qualified to practice in their home countries and register with the related professional councils in Thailand. Other than the nationality requirement, domicile presence is also required for individual professionals. In particular, house registration is required for granting of medical and dental licences. Unlike the inward movement, there is no outward movement requirement of medical professionals. Specifically, medical professionals do not need an exit permit or pay an extra fee.

Some restrictions are applied to the movement of intra-corporate transferees. There are minimum requirements to have nationals or residents in foreign-invested professional service firms. That is, the ratio of foreigners to Thais employed in any business must not exceed 1 to 4, unless granted permission by the Board of Investment. Furthermore, the entry and stay of paramedical service providers (for all categories, except unskilled workers) is subject to labour market tests. In addition, managers of dental service firms and executives and managers of para-medical service firms must be locally licenced. For instance, a person who receives a licence to manage a dental sanatorium, must be licenced as a dental practitioner by the Dental Council of Thailand. Managerial personnel in medical service firms are not required to be locally licenced, unless they practice with patients. In terms of restrictions on managerial personnel, members of the board of directors in any

medical firm must be locally domiciled if they are medical practitioners, and a person applying to operate a dental sanatorium licence must be domiciled in Thailand.

In contrast to Modes 3 and 4, there is no restriction on Modes 1 and 2. That is, foreign medical professionals located abroad are able to provide cross-border services to patients in Thailand. Similarly, domestic residents can purchase medical services while abroad.

1.8.2. Regulations on licensing and operation

Foreign medical, dental, and nursing practitioners, except those from ASEAN countries, are not allowed to practice in Thailand. In order to be licenced to practice locally, medical and dental professionals from other ASEAN countries have to meet the following requirements:

First, he or she is in possession of a medical qualification recognised by the Professional Medical Regulatory Authority (PMRA) or Professional Dental Regulatory Authority (PDRA) of the country of origin and host country.

Second, he or she is in possession of a valid professional registration and current practicing certificate to practice medicine issued by the PMRA/PDRA of the country of origin.

Third, he or she has been in active practice as a general medical practitioner or specialist for not less than 5 continuous years in the country of origin.

Fourth, he or she is in compliance with the continuing professional development (CPD) policy mandated by the PMRA/PDRA of the country of origin.

Fifth, he or she has been certified by the PMRA/PDRA of the country of origin of not having violated any professional or ethical standards, local and international, in relation to the practice of medicine in the country of origin and in other countries as far as the PMRA/PDRA is aware.

Sixth, he or she has declared that there is no investigation or legal proceeding pending against him/her in the country of origin or another country.

Finally, he or she is in compliance with any other assessment or requirement imposed on any such applicant for registration as deemed fit by the PMRA/PDRA or other relevant authorities of the host country.

Nursing professionals have to meet the following requirements.

First, he or she has been granted a nursing qualification.

Second, he or she has a valid professional registration and/or licence from the country of origin and a current practicing licence or certificate or any relevant certifying documents.

Third, he or she has minimum practical experience in the practice of nursing of not less than 3 continuous years prior to the application.

Fourth, he or she has compliance with satisfactory continuing professional development in accordance with the policy on continuing professional development in nursing as may be mandated by the nursing regulatory authority (NRA) of the country of origin.

Fifth, he or she has certification from the NRA of the country of origin of no record or pending investigation of having violated any technical, professional, or ethical standards, local and international, for the practice of nursing.

Finally, he or she has compliance with any other requirements, such as to submit for a personal medical examination or undergo an induction program or a competency assessment, as may be imposed on any such application for registration and/or licence as deemed fit by the NRA or any other relevant authority or the government of the host country concerned.

Regarding regulations on operation, all medical professional services are required by law to be performed only by licenced medical professionals. In addition, there are restrictions on advertising, marketing, or soliciting in all medical professions. Fee setting also has to follow a guideline.

In the case of regulatory changes, professional bodies are consulted in advance, and laws and regulatory decisions affecting each profession are made publicly through the professional body's website as well as official gazette.

1.9. Current situation of liberalisation in the tourism sector

This section provides current restrictions on the tourism sector in Thailand in terms of market access, ownership, and regulation.

1.9.1. Market access

Regarding Mode 3, there are restrictions on market access for foreign-invested tourism companies located in Thailand, mainly based on the Foreign Business Act B.E. 2542 (1999) and the Tourism and Tourist Guide Business Act B.E. 2551 (2008). In particular, according to Section 8 of the Foreign Business Act, no foreigner may operate such businesses, in respect of which Thai nationals are not yet ready to compete with foreigners, as prescribed in List Three, unless obtaining permission from the Director-General with the approval of the Foreign Business Commission. Businesses indicated in List Three cover all service businesses, including the hotel business (with the exception of the hotel management service), tourist guide, and sale of food and beverages.

In addition, tourism and tourist guide businesses have to comply with the Tourism and Tourist Guide Business Act. Section 4 of the act indicates that a tourism business means a business of providing or facilitating one or more travel-related services such as accommodation, food, tourist guide, or other services to tourists for pleasure or for any other purpose. Tourist guide means a service provider who ordinarily guides tourists to visit any place and provides advice and knowledge in any aspect to tourists.

For tourism businesses, under Section 15 of the act, tourism business service suppliers shall apply for a tourism business licence. Section 17 also indicates that if the applicant for a tourism business licence is a partnership, the unlimited liability partner shall have Thai nationality. If the applicant is a limited company or public company limited, not less than 51 percent of its capital shall be held by a natural person with Thai nationality and more than one-half of its directors shall be a natural person with Thai nationality.

Similarly, for a tourist guide, Section 49 specifies that a tourist guide shall apply for a tourist guide licence. Section 50 indicates that the applicant for a tourist guide licence shall be of Thai nationality.

To sum up, foreign-invested tourism providers are allowed to establish in all legal forms (that is, subsidiaries, branches, and representative offices) with a maximum equity participation of less than 50 percent. However, there are no

restrictions on domestic and foreign-invested tourism providers in terms of the scope of operations.

Unlike Modes 3 and 4, there is no restriction on Modes 1 and 2. That is, domestic residents can also purchase foreign tourism services cross-border or while abroad. Offshore tourism firms are also allowed to solicit business through advertising in domestic country.

Furthermore, foreign tourism personnel and intra-corporate transferees have a limitation on their length of stay. To work in Thailand, foreigners have to apply for a non-immigrant B (working) visa, which is initially granted for a period of stay not exceeding 90 days.

After getting a non-immigrant B (working) visa, foreigners have to apply for a work permit (valid for the same amount of time as the visa). After receiving a work permit, foreigners can apply for an extension of the visa from 90 days to 1 year. With the extended visa, foreigners can extend the work permit to 1 year as well. Once foreigners are residents in Thailand, they can apply for both visa and work permit extensions every year.

1.9.2. Ownership

Private ownership and foreign ownership are allowed for firms providing tourism. In particular, the maximum private equity permitted for new domestic entrants and existing providers is 100 percent, but foreign ownership for new entrants and existing providers must be less than 50 percent.

1.9.3. Regulations on registration, authorisation, or licensing

Other than the above restrictions, foreign-invested tourism firms are not subject to different regulations or licensing requirements from domestic firms. Relative to domestic firms, foreign tourism firms are also not limited in the types of services they can provide or clients they can service, and there is no requirement for foreign-invested tourism firms to train local staff.

1.10 Current situation of liberalisation in telecommunication services

This section provides not only current restrictions in terms of market access, ownership, and regulation, but also the market structure of the telecommunication service sector in Thailand.

1.10.1. Market access

Regarding Mode 3 (commercial presence), there are restrictions on entry of new facilities-based and resale-based suppliers of telecommunication services by firms with foreign participation, but not by domestic firms. In particular, under Section 8 of the Telecommunications Business Act B.E. 2544, an applicant for Type Two and Type Three licences of facilities-based suppliers¹² shall not be a foreigner under the law on foreign business.¹³ The only requirement is that an applicant for Type Two and Type Three licences cannot be a foreigner under the law on foreign business. Similarly, according to the Telecommunications Business Act, resale-based companies are related to Type One and Type Two licences¹⁴. The only requirement is that the applicant for a Type Two licence shall not be a foreigner under the Foreign Business Act. The Telecommunications Business Act does not require foreign facilities-based as well as resale-based telecom service suppliers to establish under certain legal form. In particular, companies can establish in any legal form as long as foreign participation is less than 50 percent.

¹² Type Two Licence is a licence granted to the telecommunications business operator who operates with or without his or her own network for telecommunications services intended for a limited group of people, or services with no significant impacts on free and fair competition or on public interest and consumers. In contrast, a Type Three Licence is a licence granted to the telecommunications business operator who operates with his or her own network for telecommunications services intended for general public, or services which may cause a significant impact on free and fair competition or on public interest, or a service which requires special consumer protection.

¹³ According to the Foreign Business Act of 1999, the term foreigner means:

- (1) Natural person not of Thai nationality.
- (2) Juristic person not registered in Thailand.
- (3) Juristic person registered in Thailand having the following characteristics: (a) Having half or more of the juristic person's capital shares held by persons under (1) or (2) or a juristic person having the persons under (1) or (2) investing with a value of half or more of the total capital of the juristic person. (b) Limited partnership or registered ordinary partnership having the person under (1) as the managing partner or manager.
- (4) Juristic person registered in Thailand having half or more of its capital shares held by the person under (1), (2) or (3), or a juristic person having the persons under (1), (2), or (3) investing with the value of half or more of its total capital.

¹⁴ That is, a Type One Licence is a licence granted to the telecommunications business operator who operates without his or her own network for telecommunications services which are deemed appropriate to be fully liberalised. A Type Two Licence is a licence granted to the telecommunications business operator who operates with or without his or her own network for telecommunications services intended for a limited group of people, or services with no significant impacts on free and fair competition or on public interest and consumers.

For leased lines and private networks, companies are permitted to operate private networks of ‘leased lines’ and ‘own facilities’ between their various premises. Prior authorisation however is required. As mentioned earlier, under Section 8 of the Telecommunications Business Act, an applicant for Type Two and Type Three licences shall not be a foreigner under the law on foreign business. There is no prohibition on the interconnection of private networks by law.

Concerning restrictions on Mode 1 (cross-border trade), the cross-border supply or consumption of telecommunication services over the networks of facilities-based and resale-based service suppliers shall not be provided by foreigners. Under Section 8 of the Telecommunications Business Act, a foreigner cannot apply for Type Two and Type Three licences.

1.10.2. Ownership

Private ownership of facilities-based and resale-based telecom service suppliers for existing operators and new entrants are allowed with the maximum private equity of 100 percent, but the suppliers must be Thai. On the other hand, foreign ownership of facilities-based and resale-based telecom service suppliers for existing operators and new entrants are allowed with the maximum private equity of less than 50 percent, according to the law on foreign business.

1.10.3. Regulations

Regarding regulations on licencing, to provide facility-based telecom services, an individual license is required for all services. In terms of the selection process, an auction process is used for satellite international voice telephone services (fixed), mobile voice telephone, and mobile, 3G, and 4G data communications, while a first-come first-served rule is applied to local, domestic long distance, and wire or cable international voice telephone services (fixed), fixed data communications, leased lines, internet access, and voice over internet protocol (VOIP) services. To provide resale-based telecommunication services, a general licence is required for all services, and a first-come first-served rule is applied to all services.

In short, Type One and Type Two licences are automatic licences, while the Type Three licence is a discretionary licence. In the case of Type Three, if there is

scarce resource (limited spectrum), the selection process is by auction.¹⁵ But if there is no scarce resource, it is a non-automatic licence, approved and granted by the National Broadcasting and Telecommunications Commission (NBTC).

Other than regulation on licencing, regulation of network interconnection is also applied. That is, interconnection agreements among service providers are determined by private negotiation (but general terms set by regulatory agency) between fixed line service providers, between mobile and fixed line carriers, and between mobile carriers, but by private negotiation between parties in the case of internet service providers.¹⁶ Moreover, the regulatory agency sets the technical standards, procedures, and time frames for interconnection, as well as points and price of interconnection between fixed line service providers, between mobile and fixed line carriers, and between mobile carriers, but only the procedures for interconnection between internet service providers.¹⁷

Thailand also regulates end-user tariffs. In particular, for fixed line calls, end-user tariffs are historically determined by the incumbent. In October 2012, the National Broadcasting and Telecommunications Commission (NBTC) Notification Re: Abolishing Temporary Maximum Rates Stipulated by the National

¹⁵ According to the Act on Organisation to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services B.E. 2553 (2010), under Part 4 of Telecommunications Regulation, Section 45 specifies that any person who wishes to use spectrum for the purpose of telecommunications business operation shall obtain a licence under this Act by means of spectrum auctions in accordance with the criteria, procedures, duration, and conditions as prescribed by the NBTC (National Broadcasting and Telecommunications Commission).

¹⁶ According to the Telecommunications Business Act B.E. 2544, Chapter II, Access and Interconnection of Telecommunications network, Section 25 specifies that the licensee who owns the telecommunications network shall have the duty to allow other licensees to interconnect with his or her telecommunications network in accordance with the criteria and procedures prescribed by the Commission. The licensee who owns the telecommunications network shall allow other licensees to access his or her network in accordance with the criteria and procedures prescribed by the Commission.

¹⁷ According to the Notification of the National Telecommunications Commission, Re: Telecommunications Network Access and Interconnection, B.E. 2556, Clause 7 identifies that licensees with their own telecommunications network shall provide the location of points of interconnection where it is technically feasible. The following points of interconnection shall be considered as technically feasible: (a) tandem or transit switches (b) toll switches (c) gateway mobile switches (d) international switches (e) signalling transfer points (f) transmission stations, including submarine cable landing stations and satellite earth stations (g) national internet exchange and international internet gateway (h) existing or previous points of interconnection.

Telecommunications Commission (NTC) Notification Re: Maximum Rate of Service fee and Advance Service Fee Collection in Telecommunications Business B.E. 2549 (2006) came into effect. Consequently, all temporary maximum rates were abolished, but only mobile voice services are regulated. In addition, prices are only monitored from operators' monthly reports of all their price offers.

Unlike fixed line calls, end-user tariffs for mobile calls are determined by the rate of return regulation. According to NBTC Notification Re: Maximum Rate of Service Fee for Domestic Mobile Voice Service B.E. 2555 (2012), the maximum rate of domestic mobile voice service is determined on the basis of rate of return. The rate must not exceed B0.99 per minute. However, the rate is applied to only significant market power (SMP) operators on 2G frequency (namely, Advanced Info Service (AIS) and Total Access Communication (DTAC)).

To pursue the universal service, the policy instruments are rollout obligations in service licenses and subsidies to operators.

1.10.4. Market structure

In general, several key players dominate the telecommunication services sector in Thailand. In particular, there are three operators in the domestic fixed line market. The operator with the biggest market share (60 percent) is TOT public company limited, fully owned by the government. The other two operators are True Corporation with market share of 28.5 percent and TT&T with market share of 11.5 percent.

In the international fixed line market, there are six operators. However, the top-three players capture 74 percent of total market share. The top-three players in the market are CAT Telecom (100 percent owned by the government) with 34.3 percent market share, AIN Globalcomm with 21 percent, and DTAC Network with 18.4 percent.

Similarly, in the mobile voice telephone services, the top-three players, with total market share of 86 percent, dominate the market. These top-three operators are Advanced Info (35 percent of market share), Total Access (31 percent of market share), and True Move (20 percent of market share).

1.11. Current situation of liberalisation in maritime services

This section provides restrictions on investment, operation, and movement of people in the maritime service sector in Thailand.

1.11.1. Investment

Although there is no restriction on legal forms of establishment, foreign ownership in the provision of maritime services is allowed with maximum foreign equity of 49 percent (except in internal waterways services where maximum foreign equity allowed is 30 percent).

1.11.2. Operation

There are some restrictions on the operation of maritime service business in Thailand. In particular, shipping private cargo is restricted. The tentative restrictions are posed only on arriving cargo, except when there are no national-flagged vessels operating the route. There are also some restrictions on cabotage. Foreigners (including those from ASEAN countries) generally cannot provide domestic cabotage service. In addition, the maximum foreign equity permitted in a shipping company is 30 percent, due to the cabotage restriction. However, there is no legislative framework to regulate competition among shipping conferences or domestic shipping lines.

The Marine Department, Ministry of Transport is the main authority for shipping and ports. The Port Authority of Thailand is also an independent authority for non-private ports. Private ports, nevertheless, are not regulated but are under supervision of the port authority.

At the main port or a land entry point, port-related services are not subject to monopoly. Nonetheless, Laem Chabang – one of the major ports in Thailand – can provide licences to the cargo handlers at the port. Foreign maritime service firms are subject to the maximum foreign equity of 49 percent. The government also regulates the terminal handling costs.

1.11.3. Movement of people

There is a nationality requirement for employees and boards of directors of foreign-invested maritime companies. That is, according to the Thai Vessels Act, employees of sea-going shipping and internal waterways firms must be Thai

nationals. Boards of Directors of foreign-invested maritime companies that operate any kind of maritime services must also have Thai nationality.

1.12. Key bottlenecks and ways forward for services liberalisation

Overall, most services sectors in Thailand are still protected from foreign competition. Moreover, Thailand's political commitments on services liberalisation are still limited. For example, the AFAS 8th package of commitments allows foreign ownership up to 70 percent for selected telecommunication subsectors (telex, fax, telecommunication consulting service), and tourism subsectors (six star hotel, tourism data service [not including hotel reservation, and air ticket], amusement park), but these liberalised subsectors are small in their share of the economy. On the other hand, larger subsectors, such as voice and data services of the telecommunication sector and hotel reservation and air ticket of the tourism sector are not included in the commitments.

However, other services sectors have started to become more liberalised, such as banking, insurance, and tourism (hotel) because Thai businesses in these sectors have started to invest in other countries, especially in Cambodia, the Lao People's Democratic Republic, Myanmar, and Viet Nam. Thai businesses support the liberalisation in these sectors as they have comparative advantage against players from other countries. The health services sector is also more liberalised because Thailand is competitive in this sector.

The key bottleneck of liberalisation is that the domestic laws and regulations do not promote competition; therefore a few key players dominate some markets. For example, under the Foreign Business Act, no foreigner may operate businesses in List Three (Thai nationals are not ready to compete with foreigners), which includes all services sectors. In addition, the restrictions for foreign investors in Thailand are in capital participation as well as licenses to operate in specific businesses, such as telecommunications and banking. Moreover, the order of the Royal Thai Police allows the ratio of foreigners to Thai employed in any businesses to not exceed one quarter.

The ways forward for services liberalisation in Thailand are as follows.

First, Thailand should have a clear direction or policy on services liberalisation. Then, other supporting policies should follow that clear policy. For example, any FTAs or agreements with other countries should be used as a tool to achieve the policy.

Second, Thailand may consider reforming the Foreign Business Act (1999) by reducing the items on the negative list so that the broad coverage under List Three can be reduced.

Third, Thailand should consider liberalising the services sectors which function as intermediate inputs to other sectors, such as maritime and road transportation, voice and data, and banking and insurance services, to increase the competition in the sectors, which may lead to quality improvement and cost reduction.

Finally, to be competitive in the services sectors, Thailand should not protect domestic service providers mainly by impeding foreign competition, but should focus more on developing a business environment which facilitates their businesses, such as speeding up the procedures for getting licenses or permits, providing access to capital for small and medium enterprises (SMEs), improving personnel skills and knowledge, and promoting research and development.

2. Non-tariff measures adopted in ASEAN and their impacts on the selected firms in Thailand

As tariffs of almost all goods traded are approaching zero, several studies found an increasing use of non-tariff measures (NTMs) in ASEAN. There is some anecdotal evidence that several ASEAN member countries still maintain or even impose stronger NTMs. There is increased concern that some countries will create new NTMs to protect their domestic markets. Some of these measures, either deliberate or not, are barriers to trade as they eventually impact on either quantities or prices of goods in the market. This chapter aims to identify key NTMs urgently needing to be addressed as they have adverse impacts on the competitiveness of Thai

firms, and provide policy recommendations on how to rationalise and streamline these NTMs.

This chapter is organised in three sections. The first section is an overview of NTMs adopted in ASEAN. The second section summarises key NTMs encountered by selected firms in Thailand and their impacts on these firms' competitiveness. The last section concludes with policy recommendations on how to rationalise and streamline these NTMs.

2.1. Overview of non-tariff measures adopted in ASEAN

There have been a variety of NTMs adopted in ASEAN. According to TDRI (2013a), import prohibitions for certain hazardous goods, non-automatic licensing for some sensitive goods, and technical regulations for a wide range of consumer goods are among the most prevalent ones (Table 3). TDRI (2013a) also indicated that the extent of NTMs adopted differs across ASEAN countries (Figure 6 and Figure 7). More developed countries such as Singapore imposes fewer NTMs, with existing ones aiming primarily to protect consumers and the environment. The measures are transparent and non-discriminatory. On the other hand, developing countries such as Viet Nam and Indonesia or countries with specific industrial policies such as Malaysia tend to impose more NTMs. These measures are non-transparent and discriminatory with objectives to protect local producers. Thailand does not impose many NTMs. Most of the implemented NTMs are intended to protect consumers and the environment, but there are still some measures for certain industries that lack transparency and are perceived to be discriminatory.

The implementation of NTMs also differs across sectors. In the case of the big three countries in ASEAN – Indonesia, Malaysia, and Thailand – the further analysis by TDRI (2013a) reveals that the sectors mostly affected by NTMs are food, pharmaceutical products, agricultural products, automotive, electronics, and electrical appliances (Figure 8).

Table 3: Types of non-tariff measures adopted in ASEAN member countries

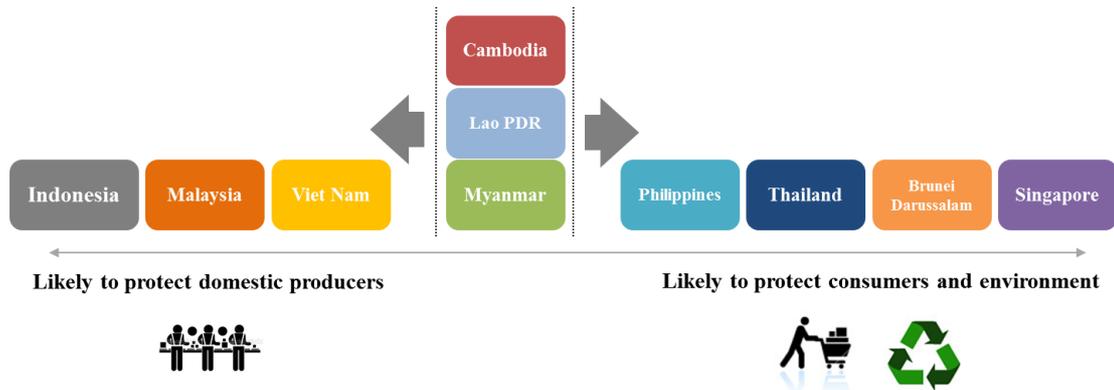
Type	Non-tariff Measures	THA	INA	MYS	SGP	PHI	BRU	VIE	CAM	LAO	MYM
Automatic licensing	Automatic licensing	Y	Y	Y	Y		Y	Y	Y	Y	
Technical	Standards, testing, labelling	Y	Y	Y	Y	Y	Y	Y	Y		Y
	Pre-shipment inspection		Y								
Quantity control	Non-automatic licensing	Y	Y	Y	Y	Y	Y		Y	Y	Y
	Import quota		Y	Y				Y			
	Import prohibition	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Monopolistic	Monopoly		Y	Y				Y	Y	Y	Y
Financial	Terms of payment										Y
Price control	Anti-dumping duties	Y	Y	Y	Y	Y					
	Countervailing duties										
	Safeguard	Y	Y			Y					

Note: Y indicates that the non-tariff measure of interest is adopted in that country.

BRU = Brunei Darussalam, CAM = Cambodia, INA = Indonesia, LAO = Lao People's Democratic Republic, MAL = Malaysia, MYM = Myanmar, PHI = Philippines, SGP = Singapore, THA = Thailand, VIE= Viet Nam.

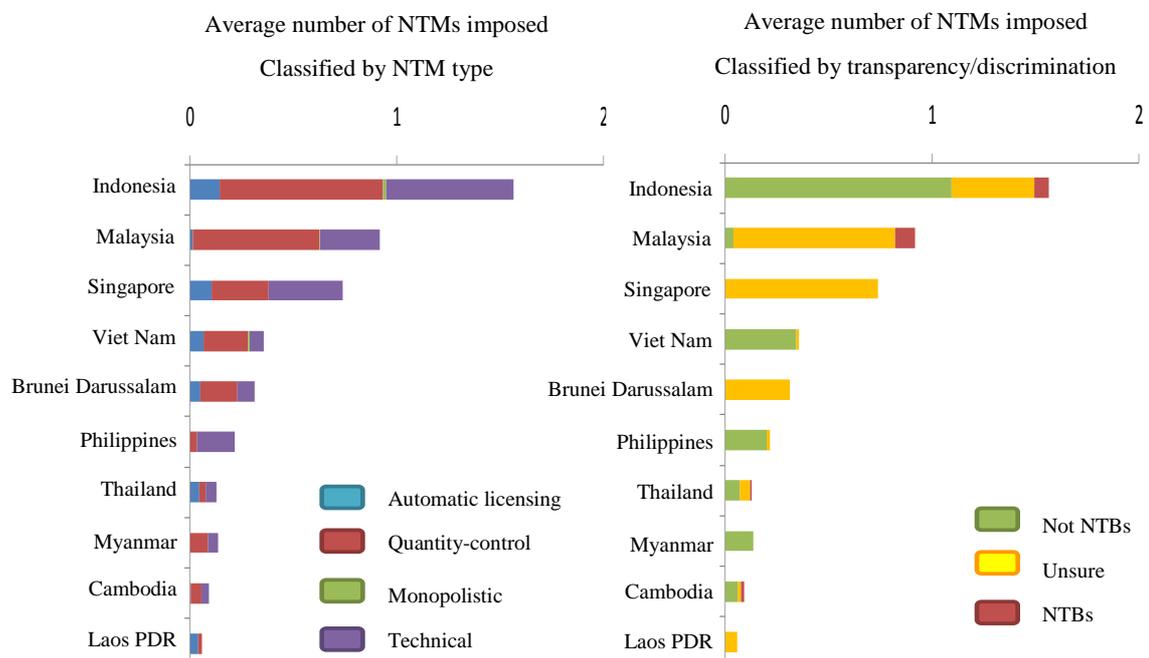
Source: TDRI (2013a).

Figure 6: State of economic development and the level of non-tariff measures adopted in ASEAN member countries



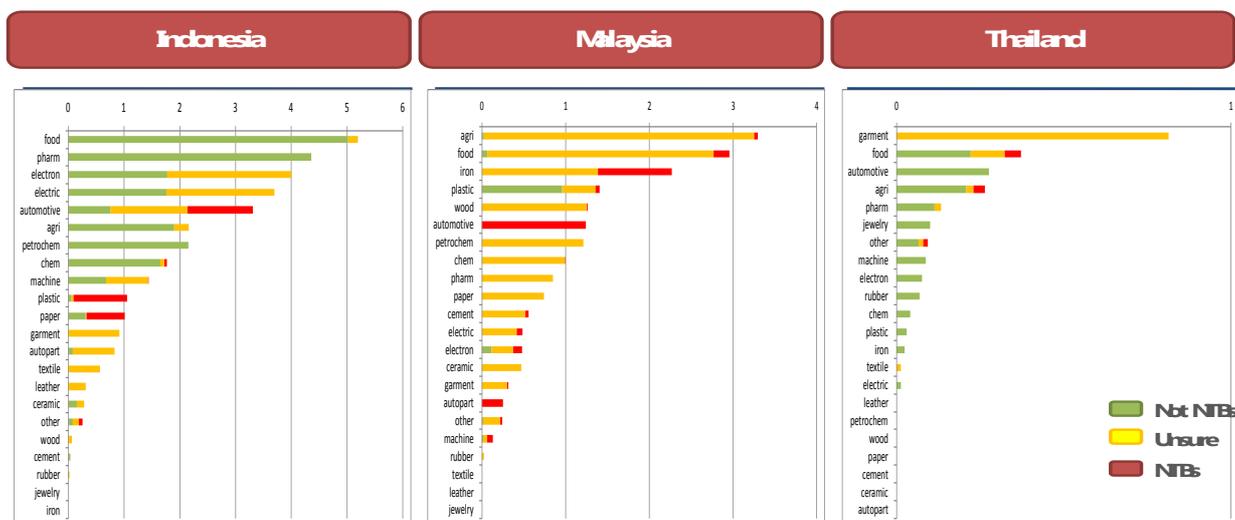
Source: TDRI (2013a).

Figure 7: Average number of non-tariff measures adopted in ASEAN member countries



Note :NTB = non-tariff measures.
Source: TDRI (2013a).

Figure 8: Sector-wise average number of non-tariff measures adopted in Indonesia, Malaysia, and Thailand



Note :NTB = non-tariff measures.

Source: TDRI (2013a).

2.2 Impacts of non-tariff measures on competitiveness of Thai firms

As previously mentioned, the sectors that are greatly affected by NTMs are appliances. We select four firms in the food, agricultural products, automotive, electronics, and electrical sectors for further in-depth study on the impacts of NTMs on firms' competitiveness. The characteristics of the selected firms vary in terms of size (SMEs or large enterprises), ownership (Thai-owned or multinational companies), and business activities (manufacturers, exporters, or importers). Key findings after the face-to-face interviews are summarised as follows.

2.2.1. Case study 1: NTMs imposed on motor vehicles imported into Thailand

Company A, a medium-sized firm in the automotive sector, is a joint venture between the world's fifth largest truck manufacturer and its Thai counterpart whose expertise is in assembling various types of motor vehicles. Its manufacturing of pick-up trucks commenced operations in April 2008. The company's 180 employees produce 7,500 trucks a year, most of which are for local demand. In addition to manufacturing pick-up trucks, the company has also imported another bigger model of completely built mini trucks from India into the Thai market. About 45 percent of

inputs are deemed originating from domestic suppliers, while the rest including engine and body, are imported from India.

Since the company is located in a bonded warehouse, once the trucks are completely assembled, they must undergo several procedures – as if they are imported from other countries – before being legally distributed in Thailand. As there is no crucial burden arisen from NTMs associated with the importation of inputs into Thailand, the first case study summarises interesting insights of NTMs mostly imposed on motor vehicles imported into Thailand.

For the importation of trucks into Thailand, Company A has mainly encountered six types of non-tariff measures: authorisation requirement for technical barriers to trade (TBT) reasons (B14), product quality or performance requirement (B7), testing requirement (B82), certification requirement (B83), inspection requirement (B84), and product registration requirement (B81).

Authorisation requirement for TBT reasons (B14), product quality or performance requirement (B7), testing requirement (B82), and certification requirement (B83)

Two licences are required before motor vehicles can be distributed in the Thai market; the first is issued by the Thailand Industrial Standard Institute (TISI) and the second is from the Department of Land Transport. Each authority has its own purpose. The standard licence is meant for ensuring the products followed specific technical regulations while the transport permit is meant for ensuring conformity of assessment procedures. There is a need to prove to each authority that the motor vehicles meet its requirements before the licence is granted.

The TISI, the government entity, has a legislative mandate under the Industrial Product Standards Act 1968 to issue technical regulations and standards to which manufacturers of motor vehicles and auto parts must conform and certify compliance. Such technical regulations and standards can be classified into two broad types, one for ensuring product safety and the other for addressing environment-friendly concerns. So far, TISI has promulgated hundreds of technical regulations and standards related to automotive safety and emission of pollutants, nine of which are mandatory and directly relevant to Company A's products. (See TISI website at http://app.tisi.go.th/standard/comp_tha.html). These nine technical regulations require that the following pass specific performance testing by the

designated laboratories and be successfully certified by the competent certifying bodies: 1) Euro 4 exhaust emission from light vehicles with a gasoline engine (whose standard code is TIS 2540-2554), 2) Euro 4 exhaust emission from light vehicles with a diesel engine (TIS 2550-2554), 3) Euro 4 exhaust emission from light vehicles with an engine using either compressed natural gas or liquefied petroleum gas as fuel (TIS 2555-2554), 4) diesel engine (TIS 787-2551), 5) liquefied petroleum gas tank (TIS 370-2552), 6-8) safety glass (TIS 196-2536, TIS 197-2536, and TIS 198-2536), and 9) seat belts (TIS 721-2551). The costs for testing and certification of each technical regulation vary across laboratories and certifying bodies. For example, the Thailand Automotive Institute, an independent public organisation, charges THB157,825 (about USD4,850) and THB90,950 (about USD2,800) for testing and certification of exhaust emission from light vehicles with a gasoline engine and a diesel engine, respectively. On the other hand, for the same testing and certification, the Pollution Control Department charges THB50,400 (about USD1,575). In addition to the testing and certification of products, there is also the need for TISI officers to annually conduct factory inspections. This is to ascertain that certified products have been produced in the nearly identical facility at all times. As a mandate from the parent company, Company A is assigned to make an appointment with TISI officers and organise a factory inspection trip to India. According to the interview, Company A covers the associated costs.

As for the other permit, manufacturers and importers of motor vehicles must submit an application form together with other supporting documents to the Department of Land Transport. Supporting documents required include a document elaborating specific characteristics and technical specifications of motor vehicles (such as their size, shape, design, functions, and performance), drawings of motor vehicles, and performance test reports done by certified laboratories. The permit, commonly known as a vehicle type approval, is granted if it is ensured that motor vehicles could run on roads safely even under unexpected conditions. This also requires a conformity assessment in which motor vehicles are physically inspected by the department's officers, performance tested by competent laboratories, and certified by designated certifying bodies.

According to the interview, it is not difficult for the company to comply with any standards and conformity assessments. In addition, conformity assessment costs incurred are acceptable even with the associated travel costs when TISI officers inspect the factory in India before providing the certification to Company A¹⁸ because this will result in the reduction of costs and time required for product testing and certification. In other words, these requirements have marginal impact on production costs and prices. Nonetheless, the company has complained that making an appointment with TISI officers is not easy as there are not sufficient officers available at the company's most convenient time, suggesting that there might be inefficiencies in the implementation of this measure.

Inspection requirement (B84)

After arrival in Thailand, all imported motor vehicles are inspected by a customs inspector. A complete import declaration document containing information such as the chassis and engine numbers, model, engine capacity, and body type must be shown at the inspection. Upon the inspector's approval, an import certificate called 'Form No.32' is issued.

Company A claims that the issuance of the import certificate takes a long time. In some cases, it can take 3 weeks. The delay in securing the certificate causes an unnecessary inventory cost and subsequently results in a nuisance fine of THB200 (about USD6) per shipment when the company is late in registering its product with the Department of Land Transport. It is noteworthy that not only Company A, but almost all companies whose motor vehicles are inspected by the Laem Chabang Port Customs Bureau face this situation from time to time, suggesting that there is inefficiency in the implementation of this measure, at least at this bureau.

Product registration requirement (B81)

According to the Motor Vehicle Act 1979 and the Land Transport Act 1979, all new motor vehicles, either imported or locally assembled, must be registered with the Department of Land Transport. The objective of the registration is to update the

¹⁸ The certification guarantees that every single motor vehicle produced in the specific period of time at the same facility is presumably identical in terms of its technical specifications and performances.

number of motor vehicles ready to be placed on the market each month. The due date for monthly updating is the fifteenth of each month. Companies who fail to complete the registration process on time are fined THB200 per shipment. Supporting documents required during the registration include Form No.32, a receipt showing that all liable duty is paid, and the company's juristic entities registration.

Although the product registration requirement is straightforward and easy to comply with, the delay in securing the pre-requisite documents, especially Form No.32, causes unnecessary fines as previously mentioned.

2.2.2. Case study 2: NTMs imposed on motor vehicles exported to Malaysia

The following information was gathered during the interview with Company A, the same company as in Case study 1. In addition to entering the Thai market, the company started exporting its products to Malaysia in 2014. The second case study reveals the impacts of NTMs confronted by the newcomer.

For the exportation of pick-up trucks to Malaysia, Company A has mainly encountered six types of non-tariff measures: 1) non-automatic import licencing other than for sanitary and phytosanitary (SPS) and TBT reasons (E1), 2) product quality or performance requirement (B7), 3) testing requirement (B82), 4) certification requirement (B83), 5) inspection requirement (B84), and 6) product registration requirement (B81).

Non-automatic import licensing other than for SPS and TBT reasons (E1)

To export a motor vehicle to Malaysia, an application must be made to the Ministry of International Trade and Industry (MITI) for a non-automatic import licence called 'approved permit' (AP). To apply for a permit, several supporting documents are required for submission, which vary with the characteristics of importers. However, Company A's importing partner is responsible for the preparation of almost all the supporting documents. Company A only provides its importing partner with documents containing information such as the chassis and engine numbers, model, engine capacity, and body type.

According to MITI's guidelines to apply for a motor vehicle import licence, processing the application, and issuing an approved permit takes either 7 working days upon receipt of completed manual application or 5 working days for an online application. (See details at MITI website at <http://www.miti.gov.my>). However, Company A complains that it took 7 months to secure a permit, suggesting that there is either arbitrariness or inconsistency in the implementation of this measure. The delay in securing the permit reportedly interrupted their marketing plan and caused an additional THB6 million inventory cost (about USD185,000) for the undeliverable cars.

Product quality or performance requirement (B7), testing requirement (B82), and certification requirement (B83)

The Malaysian Department of Standards has adopted hundreds of technical regulations and standards related to automotive safety and emission of pollutants, 12 of which are mandatory and relevant to Company A's product. (See details at Malaysian Department of Standards website at <http://www.msonline.gov.my/>). According to the interview, it is not difficult for the company to comply with these standards and conformity assessments. In other words, these requirements have negligible impact on output, production costs, and prices. For example, the requirement that vehicle engines meets Euro 2 exhaust emission standard is not a problem since the engines manufactured in Thailand have already qualified for a higher Euro 4 standard.

Inspection requirement (B84)

Once arriving in Malaysia, Puspakom, the only vehicle inspection company appointed by the Malaysian government, inspects all imported vehicles. A bill of lading and an approved permit must be shown at the inspection. According to the Puspakom website, it costs RM125 (about USD39) per car and generally requires 1 working day to complete the inspection (See website at <http://www.puspakom.com.my>). The output, production costs, and prices are not affected by the inspection procedures; as a result, Company A has no complaint about complying with this measure.

Product registration requirement (B81)

According to the Road Transport Act 1972, all new motor vehicles, either imported or locally assembled, must be registered with the Malaysian Road Transport Department. As the registration completion is the responsibility of Company A's importing partner, there is no impact on company A's output, production costs, and prices owing to this measure.

2.2.3. Case study 3: NTMs imposed on fruit juices exported to Indonesia

Established in 1976, Company B is a medium-sized Thai-owned subsidiary of a large-sized conglomerate firm in the agro-food sector in Thailand. The company is a manufacturer and an exporter of canned fruits as well as ready-to-drink juices, including orange juice, mixed vegetable juice, beetroot juice, aloe vera juice, white grape juice, and guava juice. Among all, 100 percent freshly squeezed orange juice is a flagship for sales expansion in both domestic and export markets.

Regarding the export market, the Indonesian and Philippine markets together contribute 6–7 percent of the company's total annual sales. According to the interview, Philippine import-related measures are well in line with international ones, especially those adopted by the United States of America. The company, as a result, does not complain about the NTMs implemented by the Philippine government. On the contrary, Indonesian import-related measures, especially those recently adopted after the import tariffs under the ASEAN Trade in Goods Agreement are eliminated, are restrictive and cause the company excessive burden. The third case study summarises Company C's view on selected NTMs imposed by Indonesia on imported fruit juices.

For the exportation of fruit juices to Indonesia, Company B has mainly encountered 10 types of non-tariff measures: 1) non-automatic import licencing other than for SPS and TBT reasons (E1), 2) special authorisation requirement for SPS reasons (A14), 3) product registration requirement for SPS reasons (A81), 4) testing requirement for SPS reasons (A82), 5) certification requirement for SPS reasons (A83), 6) labelling requirement for TBT reasons (B31), 7) product identity requirement (B6), 8) testing requirement for TBT reasons (B82), 9) certification requirement for TBT reasons (B83), and 10) inspection requirement (B84).

Non-automatic import licensing other than for SPS and TBT reasons (E1)

In August 2013, Indonesia adopted two ministerial regulations on the importation of fruit juices and other horticultural products.¹⁹ These regulations are the Ministry of Agriculture Regulation 86/2013 (replacing Regulation No. 47/2013, 60/2012, and 3/2012) and the Ministry of Trade Regulation 47/2013 (amending Regulation No. 16/2013, which replaced regulations No. 60/2012 and 30/2012). The regulations require importers to obtain three permits in order to import such products: 1) a registered importer (RI) or a producer importer (PI) designation licence from the Ministry of Trade, 2) an import recommendation of horticultural products (RIPH) from the Ministry of Agriculture, and 3) an import approval (known as *surat persetujuan impor* or SPI) from the Ministry of Trade.

Concerning the first permit, importers are required to obtain a licence as importers of horticultural products for either further distribution (RI) or for their own manufacturing (PI), but not for both. In addition to the basic documents like company registration card and trading licence, the registered importers of horticultural products are also required to have sales contracts with at least three distributors and declare that the imported products will not be directly sold to consumers and retailers. Once granted, the licence is valid for 2 years.

Securing the latter two permits is interrelated. Registered importers must obtain an import recommendation from the Ministry of Agriculture before requesting an import approval from the Ministry of Trade. Per the Ministry of Agriculture Regulation 86/2013, RIPHs are only issued twice a year, once for a period from January through June and another for a period from July through December. The information needed when applying for an RIPH includes product name, HS code, country of origin, manufacturing location, and importing entry point. In addition to the prerequisite of securing RI and RIPH licences, importers applying for SPIs are required to specify the total quantity of a horticultural product that may be imported during the next 6 months, the period for which the approval is valid. An SPI is issued within 2 working days upon receiving the complete application. Once imported,

¹⁹ Other horticultural products are certain fresh and frozen fruits and vegetables, processed vegetables, dried fruit, and jams and jellies.

importers must submit an ‘import realisation control card’ to declare the amount of products being imported into Indonesia. This document must be submitted every month through the INATRADE system, the Indonesian online National Single Window.

Although, when asked by other countries, including the USA and New Zealand, the Indonesian government responds that it does not impose any importing limit and allows for the importation as much as specified in SPIs, many firms recognise the measure as quantitative restrictions. Importers can neither amend existing import approvals nor apply for additional ones outside the application window. Furthermore, importers must import at least 80 percent of the quantity specified on their import approval, or risk losing the right to import in the future.

According to the interview, the company’s partner in Indonesia is solely responsible for the application for all three permits. So far, there has been no impact on the company’s current output, production costs, and prices owing to this measure. Nonetheless, the company worries about the possible risk of losing the right to export its products if at least 80 percent of the quantity specified on their import approval cannot be achieved.

Special authorisation requirement for SPS reasons (A14), product registration requirement (A81), testing requirement (A82), and certification requirement (A83)

Indonesia’s National Drug and Food Control Agency, known as Badan Pengawas Obat dan Makanan or BPOM, is the government agency in charge of maintaining the food and drug control system. Its objective is to protect domestic consumers from products that do not comply with the current regulations related to safety, quality, nutrition, and labelling. In order to ensure that imported fruit juices meet the food safety requirements, the products must be registered with the BPOM. In addition, for each importation, an entry permit must be secured.

Under the Food Law, product registration is a pre-market mechanism in the food and drug control system. Importers, distributors, or retailers dealing with unregistered products are in breach of the regulations and subject to penalty. To register a product, an importer must submit to the BPOM details of the product and its ingredients, together with samples, testing reports, and certificates issued by authorised laboratories in the country of origin. If needed, additional laboratory tests

will be conducted at a facility nominated by the BPOM at the expense of the applicant. Upon approval, a registration number, called the *makanan luar* number or ML number, is issued. The ML number must be printed on food package labels. It is required that products must be re-registered every 5 years. The cost of the registration process ranges from Rp150,000 to Rp3,000,000 (or USD15 to USD300). The time it takes to register a product is up to 6 months, although in some cases it may take longer. According to the Office of the United States Trade Representative's 2014 National Trade Estimate Report on Foreign Trade Barriers, although the BPOM has improved the efficiency of its product registration system, such as through the implementation in early 2013 of an e-registration system for low-risk products, concerns remain about proposed changes to the registration requirements and submission process that would further complicate the process.

The BPOM recently issued Regulation No. 27 of 2013 regarding the supervision of foods and drugs imported into Indonesia. This regulation, which came into effect on 28 May 2013, repeals and replaces the previous regulations on imports of such products. Under the regulation, in addition to a distribution permit as previously mentioned, importers require an entry permit for each shipment from the BPOM called *surat keterangan impor* or SKI. The supporting documents required during the application for an SKI include a distribution licence approval, an analysis certificate, an invoice, a packing list, a bill of lading or air waybill, and a non-tax state revenue (*penerimaan negara bukan pajak*) payment receipt. It is also required that fruit juices and other processed foods must have at least two-thirds shelf life remaining at time of export. According to official information, an SKI costs Rp50,000 (or USD5) and is issued within 1 working day once the application is considered complete.

According to the interview, it is not difficult for the company to comply with these SPS requirements and conformity assessments. The conformity assessment costs incurred are also in the acceptable level. In addition, completion of the product registration and the entry permit application is the responsibility of Company B's importing partner. Hence, there is no impact on the company's output and only marginal impact on the production costs and prices owing to this set of measures.

Labelling requirement (B31), testing requirement (B82), and certification requirement (B83)

In general, food-labelling requirements are promulgated to ensure that domestic consumers are accurately informed about food ingredients as well as their benefits and negative effects after the food intake. These regulations aim to protect consumers from deceptive practices and misleading claims. In Indonesia, it is the Indonesian National Drug and Food Control Agency or BPOM, which is responsible for enforcing these regulations.

Originally issued in January 2005 and updated in 2011, the BPOM guidelines on nutritional labelling and advertising, require that in addition to the basic information such as the expiry date and the importer's name and address, labels must provide nutritional content information. If applicable, all food additives used must also be identified. Any claim of benefits to health must be explicitly based on product composition and normal daily consumption. Implied claims are not allowed. Misleading information is forbidden and breaches are subject to criminal prosecution.

For nutritional claims relating to the food's value as a source of energy, proteins, vitamins, or minerals, the nutritional elements must be listed, quantified, tested, and certified according to the BPOM guidelines or the CODEX standards when no BPOM guidelines exist. Therapeutic claims relating to benefits in curing a disease or health conditions are to be tested and certified according to the BPOM guidelines as well. It is also forbidden to claim that one foodstuff can ensure good health.

All information provided may be printed onto a label or packaging material. The use of stickers, which was once accepted, is prohibited. It is also required that information on labels must be exclusively provided in Bahasa Indonesia, Arabic numbers, and Latin letters. The use of any other language is permitted only where there are no substitute Indonesian words or if there is difficulty in finding Indonesian words with a similar meaning. Such approval must be obtained from the Indonesian attorney-general.

According to the interview, the BPOM used to deny certain test reports and certification issued by laboratories in Thailand despite the fact that they can be used for exporting to the Philippines. Rather, the BPOM requested that the company's

products be tested and certified in Indonesia. Such testing and certification are, for instance, those required to prove the vitamin content, ‘no sugar’ claims, and ‘containing anti-oxidant’ claims. In addition, sometimes the company finds it difficult to comply with the labelling requirements and there are additional ‘surprise’ costs incurred, suggesting that there is either arbitrariness or inconsistency in the implementation of this measure. In particular, the company has had to change its labels two to three times a year as each time the BPOM conceives that some information on the label, such as ‘super fruit’ and ‘100% natural’, are not appropriate and need to be removed. As such information is printed on the packaging material, all packaging in stock can no longer be used and has to be dumped. In addition, each label change costs a few ten thousands baht (USD1,000) per label design and at least THB100,000 (USD3,200) for a new label plate. These costs are expensive if a newly designed label can only be used for a short while. As the packaging costs roughly attribute to 10 percent of the total production cost, the company has to raise its selling price on an annual basis.

Product identity requirement (B6), testing requirement (B82), and certification requirement (B83)

Halal foods are foods that are permissible for Muslims to eat or drink under Islamic law. Even though the concept of halal foods is simple and universal, many countries have adopted their own standards and regulations in the assessment of foods’ ‘halalness’. In Indonesia, the Indonesian Islamic Council, known as Majelis Ulama Indonesia or MUI, is the sole authority responsible for establishing requirements on how to determine the halal status of foods and how to secure an Indonesian halal certification and label.

Validity of an MUI’s halal certificate is 2 years. During that period, companies must assure the MUI and Muslim consumers that they will consistently maintain the status of halal of their products by setting up and implementing a halal assurance system (HAS), perform factory audits by authorised halal certifying bodies, and have their products tested by designated laboratories when needed. Documents required for the halal certification include the HAS manual, a list of raw materials, a flow chart of related production processes, a statement that all company’s production facilities are free from pork, and a list of addresses of the company’s suppliers.

It is noteworthy that at the moment Indonesian authorities do not mandatorily require halal certification for all imported foodstuffs. In fact, a bill on halal certification has been under discussion in the Indonesian Parliament for several years. While certification is not compulsory, 88 percent of the Indonesian population is Muslim. To assure the Indonesian consumers that their products are halal, Company B and many other Thai companies exporting foods to Indonesia need to apply for halal testing and certification by the MUI.

Company B complains that halal requirements differ across countries. Thailand, Indonesia, and Malaysia, in particular, have their own requirements and complying with all of them puts undue burden on the company. In the case of the Indonesian requirements, although they are not difficult to comply with, frequent changes of requirements and arbitrariness or inconsistency in halal certification have imposed unpredictable increasing adjustment costs on the company. The company is confused and unsure whether the regulations in hand are the most recent ones. The company estimated that the associated adjustment costs in total could reach THB100,000 (USD3,200). As an alternative, the company has a plan to set up a manufacturing plant in Indonesia soon to produce some of its products.

Inspection requirement (B84)

Before exporting fruit juices to Indonesia, the Ministry of Trade Regulation No. 16/2013 requires that each shipment must undergo a pre-shipment inspection by an authorised third-party surveyor at the exporter's loading port. During the inspection, validity of the following documents is administratively verified; namely, all permits involved, a commercial invoice, either a bill of lading or an air waybill, and a packing list. In addition, the surveyor will conduct a physical inspection to ensure that the products comply with all related labelling and packaging requirements stipulated by the Indonesian government.

To fulfil the inspection requirements, both importer and exporter must proceed as follows. First, the importer must secure all licence permits and then submit the verification request (VR) online to the Kerjasama Operasi Sucofindo – Surveyor Indonesia (KSO SCISI), the state-owned surveyor assigned by the Ministry of Trade, and pay the inspection fee. The verification order (VO) will be issued and delivered electronically to a counterpart surveyor in the exporting country (such as Société

Generale de Surveillance) on the same day. The VR and all necessary and accurate data are submitted before 12 noon. Once obtaining the VR, the surveyor will send a request for information to the exporter. When the date of inspection is decided, the surveyor will carry out the task at the place appointed by the exporter. Once obtaining the inspection result from the surveyor, the KSO SCISI will issue a surveyor report called a *laporan* surveyor or LS. Finally, the importer secures the LS and submits it as a mandatory document used during the release of the goods from customs.

With the help from its importing partner, it is not difficult for the company to comply with the inspection requirements. Though inevitable, the costs incurred are predefined and inexpensive. Normally, the time it takes is within 2 weeks. But in some cases when unexpected discrepancies are found in documents, it may take 2 months to complete the process. All in all, there is no impact on the company's output and only marginal impact on the production costs and prices owing to this measure.

2.2.4. Case study 4: NTMs imposed on electrical fans and electrical motors exported to Cambodia, the Lao PDR, Viet Nam, and Myanmar

Founded in 1969, Company C, a medium-sized Thai-owned firm in the electronics and electrical appliance sector, started manufacturing desk fans with technological collaboration from Japan and Taiwan. Since then, it has been developing various products, including standing fans, oscillating ceiling fans, ventilating fans, fans for industrial application, small fan motors, bench grinders, and customised motors for specific applications. At present, the company's 150 employees produce approximately 250,000 fan sets per year, and about 100,000 motors and small fan motors per year. About 30–40 percent of the produced products are exported to neighbouring countries (Cambodia, the Lao PDR, Myanmar, and Viet Nam), the USA, and several European countries.

Thai law requires that exported electrical fans and electrical motors meet the corresponding export technical measures (P6). In addition, the exported products must comply with technical requirements implemented by importing countries, which vary across countries. For the exportation of electrical fans and electrical

motors to the USA and European countries, the company has to comply with technical requirements in the customers' country, which are Underwriters Laboratories (UL) standards for the United States and Communauté Européenne (CE) standards for Europe. On the other hand, there is no such technical requirement when exporting to Cambodia, the Lao PDR, Myanmar, and Viet Nam. As the fourth case study, certain interesting issues can be drawn from Company C's viewpoint, which could comply with both domestic and internationally-recognised standards.

Export technical measures (P6)

Electrical fans and electrical motors placed in the Thai market, and those to be exported need to prove that they meet requirements stipulated by the Thailand Industrial Standard Institute (TISI). So far, the TISI has adopted three technical regulations and standards related to Company C's products (See TISI website at http://app.tisi.go.th/standard/comp_tha.html). These three technical regulations and standards require that the following pass specific performance testing by the designated laboratories and be certified by the competent certifying bodies: 1) electrical fans (TIS 934-2533), 2) copper and copper alloys (TIS 408-2553), and 3) polyvinylchloride insulated cables (TIS 101-2553). Company C has to pay only for the testing and certification of electrical fans, which is about B10,000 (USD320) per model and leave that of the raw materials to be borne by its suppliers. The TISI conformity cost is much cheaper than that of the UL, which is about USD8,000 per model.

In addition to the testing and certification of products, there is also the need to annually conduct factory inspections by TISI officers. This is to ascertain that the certified products have been produced in the nearly identical facility at all times. The cost associated with the TISI's inspection requirement is about USD90 per inspection, which is 10 times cheaper than that required by the UL (USD1,000).

According to the interview, it is not difficult for the company to comply with the TISI standards and conformity assessments. The conformity assessment costs incurred are also in the acceptable level and merely have marginal impact on its production costs and prices. In fact, the TISI conformity marking has positive impact as it can convince consumers in the neighbouring countries where there is no technical standard adopted yet that the products' quality and safety are more superior

than those without the marking. Nonetheless, the company faces complications in the production management, as it must adjust its production facilities to comply with all diverse technical requirements. As a result, production costs per unit have a small increase.

The company also raised two interesting matters in regards to the TISI that need reforming.

First, making an appointment with TISI officers for the factory visit is not easy as there are not sufficient officers available at the company's most convenient time. It implies that there might be some inefficiency in the implementation by the TISI.

Secondly, the TISI counterfeiting monitoring system has also been inefficient as witnessed by tons of counterfeit TISI conformity mark bearing products in the market. The counterfeiting activities are harmful not only to consumers who might get injured or even killed by low quality products, but also to producers who comply with the requirements and bear such conformity assessment costs. These reportedly result in the erosion of Company C's competitiveness because its prices are one-third higher than those of rivals' products whose compliance is falsified.

2.2.5. Case study 5: NTMs imposed on motor compressors exported to several countries in ASEAN

Company D is a large-sized Thai-owned firm in the electronics and electrical appliances sector. Claimed to be the world's seventh largest manufacturer and exporter of motor compressors, the company also produces and exports a variety of related products, including condensing units in refrigeration systems, electrical motor parts, and other motor compressor parts. Ten of its production plants are located in Thailand and another one was recently established in China. About 70 percent of their products are exported each year to its expanding customer networks, such as several ASEAN member countries, China, Australia, the USA, and several countries in the Middle East and Africa.

Like electrical fans and electrical motors, it is required that exported motor compressors meet the export technical measures (P6) and customers' international certification requirements. At the moment the company's products meet many internationally recognised safety standards, such as Communauté Européenne (CE),

Underwriters Laboratories (UL), Technischer Überwachungs-Verein, China Compulsory Certificate (CCC), Saudi Standards, Metrology and Quality Organization, and Thailand Industrial Standard Institute (TISI). While there is not much complaint in complying with NTMs, the fifth case study reveals another side of impacts on firms' competitiveness as a result of NTMs implementation.

Export technical measures (P6)

At the moment the TISI has adopted three technical regulations and standards related to Company D's products (See TISI website at http://app.tisi.go.th/standard/comp_tha.html). These three technical regulations and standards require that the following pass specific performance testing by the designated laboratories and be successfully certified by the competent certifying bodies: 1) motor compressors (standard code TIS 812-2548), 2) copper and copper alloys (TIS 408-2553), and 3) polyvinylchloride insulated cables (TIS 101-2553). According to the interview, the company has to pay only for testing and certification of motor compressors, which is about B70,000 (USD2,200) per model and leave that of the raw materials to be borne by its suppliers. The TISI conformity cost is much cheaper than that of the UL, which is about USD10,100 per model.

In addition to the testing and certification of products, there is also the need to conduct factory inspection by TISI officers. This is to ascertain that certified products have been produced in the nearly identical facility at all times.

According to the interview, it is not difficult for the company to comply with the TISI standards and conformity assessments. The conformity assessment costs incurred are also in the acceptable level and merely have marginal impact on its production costs and prices.

Product quality or performance requirement (B7), testing requirement (B82) and certification requirement (B83)

Several importing countries have adopted their own technical regulations and standards with respect to product safety. For examples, China has maintained CCC requirements, Indonesia has Standar Nasional Indonesia, and Singapore has

SAFETY. According to the interview, it is not difficult to comply with these standards and conformity assessments. The conformity assessment costs incurred are acceptable and have marginal impact on production costs and prices. Nonetheless, the company claimed that testing and certification charges in China, Indonesia, and Singapore are discriminatory against imported products. In China, in particular, domestically produced products are charged at only 30 percent of that of imported products since the rest are subsidised by the government which claims that the development of laboratory facilities have already been funded, to some extent, by corporate tax revenues collected from such domestic producers. This unfair treatment results in the company's higher production costs compared to rivals' products whose testing and certification are partially subsidised.

2.3. Policy recommendations on how to rationalise and streamline non-tariff measures adopted in ASEAN

According to the five case studies, the extent of impacts on firms' performance differs across NTMs types and adopting countries. The following are NTMs that put huge burdens on Thai firms' production costs.

- Arbitrariness or inconsistency in issuing approved permits (APs) for imported vehicles by the Malaysian Ministry of International Trade and Industry, which cost 7-month inventory cost of about USD185,000 and unforeseeable opportunity costs.
- Inefficiency in issuing a Form 32 certificate for imported and domestically produced vehicles by Thai Customs, which causes an unnecessary inventory cost and a nuisance fine of about USD6 per shipment as a result of late registration with the Thai Department of Land Transport.
- Arbitrariness or inconsistency in approving the use of some information on labels by the Indonesian National Drug and Food Control Agency (BPOM), in which each label change costs about USD1,000 per label design and at least USD3,200 for a new label plate.

- Restless changes of requirements and arbitrariness or inconsistency in halal certification by the Indonesian Islamic Council (MUI), which imposes unpredictable increasing adjustment costs that may reach USD3,200.

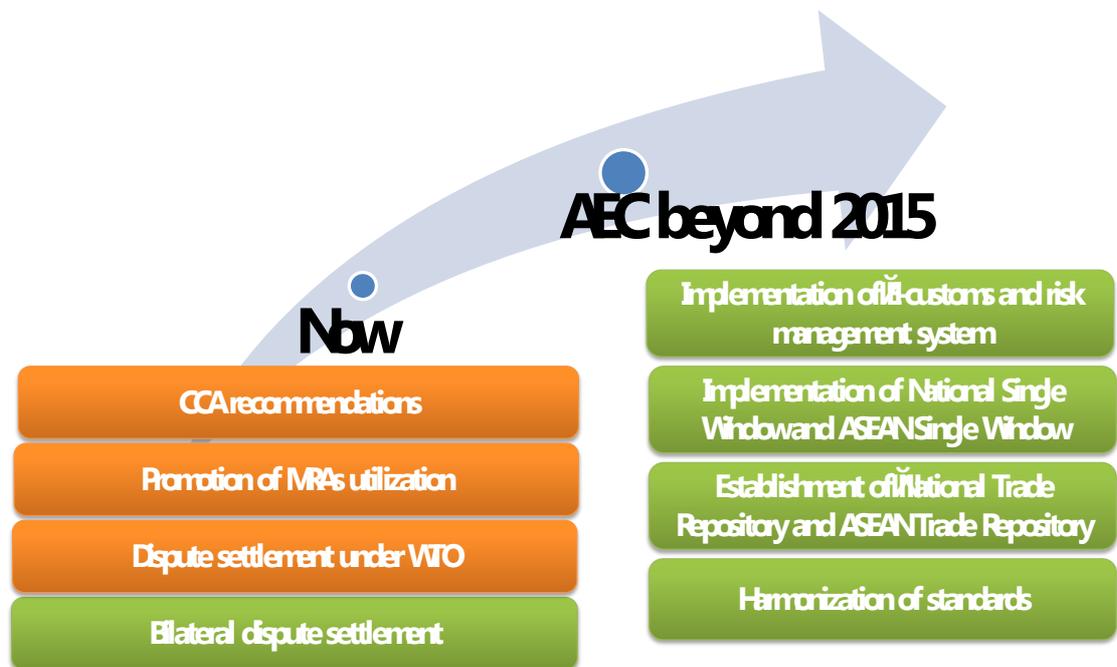
On the other hand, compliance with certain standards could provide a marketing opportunity and boost a company's image and status with its customers. The conformity assessment costs incurred are at the acceptable level and have no or marginal impact on the production costs of the firms interviewed. Nonetheless, the standards authorities, the TISI in particular, are urged to improve the quantity and quality of its personnel.

So far, ASEAN member countries have adopted several approaches in rationalising and streamlining NTMs adopted in the region. Although such attempts may not be fully effective, some could be continued. The following are some selected approaches as promising ways forward in this regard (Figure 9).

- The Thai government should expedite the implementation of the National Single Window (NSW) and encourage its links with the other ASEAN member countries under the ASEAN Single Window (ASW). The ASW should at least cover the issuance of Form 32 certificates by Thai Customs, APs by the Malaysian MITI, as well as RIPHs and SPIs by the Indonesian Ministry of Agriculture and Ministry of Trade.
- The Thai government should establish the national trade repository (NTR) that enlists the existing and up-to-date NTMs adopted in the country and encourage the completion of similar systems by other ASEAN member countries. This is to ensure that firms will be informed with which NTMs they must comply in practice.
- The ASEAN Secretariat should issue an ASEAN Directive that requires member countries to notify new NTMs to the ASEAN Secretariat and all member countries before their laws are enforced. This, in combination with effective stakeholders' engagement, is to ensure that such NTMs are in line with ASEAN standards and guidelines.
- ASEAN member countries should encourage the promotion of the existing mutual recognition agreements (MRAs) and extend the coverage of such MRAs to new products to prevent companies from such products' re-testing and re-certification. This is to ensure no double charging on conformity assessment costs.
- ASEAN member countries should expedite the harmonisation of standards, which are of high priority. Compliance with only one standard could result in production cost reduction and product quality upgrading. Halal testing

and certification requirements may be a good candidate amongst all possible flagships.

Figure 9: Ways forward in rationalising and streamlining non-tariff measures adopted in ASEAN



Note : AEC = ASEAN Economic Community; ASEAN = Association of Southeast Asian Nations; CCA = Coordinating Committee for the implementation of ATIGA; MRA = mutual recognition arrangement; WTO = World Trade Organization.

Source: TDRI (2013a)

3. Trade Facilitation in Thailand

3.1 Overview of trade facilitation in Thailand

3.1.1. Introduction

Trade facilitation is a key to developing an ASEAN single market by facilitating a free flow of goods and promoting a regional production network in ASEAN. Since it reduces a number of processes for trading, imports, exports, and customs, then exchange of goods and materials can be done amongst ASEAN Member States with less time and cost.

According to TDRI (2013b), the AEC Blueprint sets out a number of action points to create a free flow of goods, including in the following areas:

- Trade facilitation: Develop simple, harmonised, and standardised trade and customs processes, procedures, and related information flows.
- Customs integration: Integrate customs structures; modernise tariff classification, customs value and origin determination; establish ASEAN e-customs; improve capability and narrow development gaps; and adopt risk based approaches.
- ASEAN Single Window: Develop 10 National Single Windows (NSW) that enable the single submission of data and information and single decision-making for customs clearance of cargo, and then integrate the NSWs into an ASEAN Single Window.
- Standards and technical barriers to trade: Harmonise standards, technical regulations, and conformity assessment procedures through the implementation of the ASEAN Policy Guideline on Standards and Conformance.

3.1.2. Development of trade facilitation in Thailand

Since Thailand is an export-oriented country, trade facilitation is an important element of the country's Logistics Development Master Plan 2007–2011. The National Economics and Social Development Board (NESDB) initiated this plan with the aim of reducing operators' import and export handling costs.

A number of agencies participate in developing the strategies under the Master Plan: the Ministry of Finance, the Ministry of Commerce, the Ministry of Agriculture and Cooperatives, the Ministry of Science and Technology, the Ministry of Information Technology and Communications, the Ministry of Health, the National Economic and Social Development Board, and the Thai Federation on Logistics.

The five major strategies are:

- 1) To develop e-logistics and Single Window entry into a central system to provide import/export and logistics services; to link information in a government to government (G-to-G), government to business (G-to-B), and business to business (B-to-B) basis.

- 2) To improve the taxation system and customs-clearance procedures related to import and export transportation and shipping businesses with the aim of facilitating the import/export process.
- 3) To promote the setting up of distribution and logistics centres in priority markets to increase Thai business competitiveness in foreign markets.
- 4) To promote e-commerce businesses with the aim of reducing documentation and information delivery costs by expediting the enactment of the Royal Decree (Section 3 of the E-Commerce Act, B.E. 2544) on exemptions to the implementation of the law governing electronic transactions, the Royal Decree (Section 25) on safety procedures in conducting electronic transactions, the Royal Decree (Section 23) on service businesses involved in electronic transactions, the Royal Decree (Section 35) on electronic transactions by the public sector, and other relevant laws and regulations regarding electronic transactions.
- 5) To increase the efficiency and service quality with regard to the inspection of pesticides, toxic substances, and contaminants in farm imports and exports with the aim of standardising the inspection procedures so that they are acceptable to Thailand's trading partners, to speed up the process of moving goods from manufacturers to customers, and to reduce exporters' reverse-logistics costs.

According to Thailand's trade volume from 2009–2013, shipping and trucking are the favourite modes of goods transport (Table 4.1).

Table 4: Trade volume by mode of transport, 2009–2013 (thousand tons)

Mode of Transport	2009		2010		2011		2012		2013	
	Import	Export	Import	Export	Import	Export	Import	Export	Import	Export
Ship	90,702	91,717	96,263	96,128	92,965	100,675	92,976	101,342	87,391	98,696
Rail	24	164	14	158	13	133	8	95	7	90
Truck	12,142	9,122	12,730	10,182	12,689	10,779	12,194	12,380	12,723	13,419
Air	206	397	265	459	282	443	319	427	282	397
Postal and Others	0	1	1	0	2	1	1	1	1	0
Total	103,074	101,401	109,273	106,927	105,951	112,031	105,498	114,245	100,404	112,602

Source: Thailand Transport Portal (2014) (Accessed from <http://vigportal.mot.go.th/portal/site/PortalMOT/stat/index2URL/>).

3.2. Implementation of trade facilitation in Thailand

This section presents the current implementation of trade facilitation in Thailand in three parts: customs modernisation, National Single Window (NSW), and trade repository.

In order to examine the implementation, the research team evaluated responses on the current status of trade facilitation regimes from the Customs Department, the Ministry of Finance and the Department of Trade Negotiations, and the Ministry of Commerce.

3.2.1. Customs Modernisation

The development of customs modernisation is beneficial for customs control, the economy, security, and transparency. The Customs Department is responsible for customs modernisation and the NSW in Thailand.

The results of the questionnaire show that an IT system is used to support many processes and most implementation is completed. However, authorised economic operators (AEO), mutual recognition, transit cargo tracking, and automated raw materials liquidation systems have not been implemented yet.

The implementation can be summarised into four main processes: electronic transaction, customs clearance, transparency of the process, and regional customs integration.

Implementation of electronic transactions

Standardised commodity codes, tariff management, valuation system, manifest processing, goods declaration processing, and electronic payment system are the processes involving electronic transaction implementations.

HS commodity codes are also used as a standardized means of commodity classification for many processes, i.e.; valuation and risk management.

For tariff management, an automated system calculates and manages tariffs with the advance ruling system for tariff classification. Referenced tariff information is available on the website, however, there is no database containing historical and current tariff rates.

To improve the valuation system, internal and third party valuation databases are used to implement automated valuation systems and maintain reference databases

and related support activities. However, the verification of valuation and values updating processes cannot be done with an automated system.

Manifests can be submitted using an internet web application. Pre-arrival of manifests for sea-based imports are not required. Submission and processing of manifest information are supported by an IT system. Hence, the implementation of automation for manifest processing is completed.

Goods declaration processing and electronic lodgement can be done automatically using an IT system for imports and exports. In addition, this system will conduct data validation on the declaration before official submission.

Finally, for electronic payment systems, traders are able to pay duties and customs related fees through e-payment.

Comparing the results of TDRI (2012) many electronic transaction processes, such as declarations, manifest submission, and payment, have been implemented since 2012 (Table 5). These results support the readiness of electronic transactions related to customs in Thailand.

Table 5: Implementation of electronic transaction

Items	Results	
	2012 (TDRI, 2012)	2014
Electronic import declarations	Yes	Yes
Electronic export declarations	Yes	Yes
Electronic submission of manifests	Yes	Yes
Electronic payment	Yes	Yes

Source: TDRI (2012) and questionnaire results (2014).

Implementation of customs clearance processes

Implemented processes involving customs clearance are risk management, inspection management, customs bonded warehouse management, cargo release notification, post clearance audit (PCA), AEO program, and tracking system.

Risk management employs an IT system to operate and its procedures are established and documented. Cargo profiling is also included in this implementation. Furthermore, risk management techniques are in accordance with World Customs Organization (WCO) guidelines but risk assessment information will not be shared amongst other government agencies. The percentage of consignments selected for

red lane or physical inspection in 2012 was about 10 percent for both imports and exports.

For inspection management, container scanning and x-rays are used. Scheduling and assignation of inspection and inspection area are supported by an IT system. This system can assign inspectors automatically and randomly. However, the system assignment is controlled by a manual override under established auditing and oversight procedures.

For release processes, the Customs Department uses an IT system for cargo release notification and customs bonded warehouse management. Moreover, the PCA program, supported by an IT system, generates the audit schedule and assigns auditors on an unbiased basis.

For security concerns, the Customs Department implements the AEO program to facilitate trade through the accreditation by customs of trusted partners in the supply chain. The AEO program in Thailand is also supported by an IT system and incorporated into customs processing and rules. However, the integration of AEO with other countries has not been implemented yet. Another point for security concern, cargo tracking employs Radio Frequency Identification (RFID) and Global Positioning System (GPS) for positional tracking and updating goods in transit.

Therefore, many customs clearance processes use IT systems, but the integration of information with other countries in some processes, such as risk assessment and information exchange of AEO, has not been implemented yet. Furthermore, in the future, new systems or technologies might be implemented for tracking transit cargo and imported raw materials for manufacturing.

Implementation of transparency of the process

All customs rules and regulations related to import and export goods can be accessible on the Customs Department website. This proves availability and transparency of the process. Moreover, national legislation provides the rights of appeal in customs matters and the appellants have the right of eventual appeal to an independent authority. Table 6 supports the fact that most regulations and procedures related to customs have been accessible since 2012.

Table 6: Transparency of regulations related to customs

Items	Results	
	2012 (TDRI, 2012)	2014
Customs laws	Yes	Yes
Customs rules and regulations	Yes	Yes
Customs procedures	Yes	Yes
Customs forms downloadable	Yes	Yes

Note: TDRI = Thailand Development Research Institute.

Source: TDRI (2012) and questionnaire results (2014).

Implementation of regional customs integration

Thailand has implemented the ASEAN Customs Declaration document. Frontier posts following guidelines listed under Protocol 2 of the AFAFGIT and customs transit system under Protocol 7 of the ASEAN Framework Agreement on the Facilitation of Goods in Transit (AFAFGIT) have not been implemented yet.

Moreover, tariff classification (commodity codes) in Thailand is now following the ASEAN Harmonised Tariff Nomenclature (AHTN) system.

Table 7 shows Thailand's improvement for ASEAN customs integration between 2012 and 2014.

Table 7: Improvement for ASEAN Customs Integration

Item	Results	
	Preparedness in 2012 (TDRI, 2012)	Implementation in 2014
ASEAN customs declaration document	NO	Yes
ASEAN customs transit system	NO	No
AEO mutual recognition with other ASEAN member states	NO	No
Rationalisation, simplification and harmonisation consistent with ASW	Yes	Yes

Note : AEO = authorised economic operator; ASEAN = Association of Southeast Asian Nations; ASW = ASEAN Single Window; TDRI = Thailand Development Research Institute.

Source: TDRI (2012) and questionnaire results (2014).

3.2.2. National Single Window (NSW)

In Thailand, the National Single Window (NSW) is the policy for reducing cost, increasing competitiveness, and supporting international trade as integration. The NSW is an electronic system that enables secure, safe, and efficient electronic exchange of trade-related documents through a single point of entry to fulfil all

imports, exports, and transit-related regulatory requirements and to expedite the smooth flow of information of goods either for imports, exports, or transit.

The questionnaire's result shows that NSW in Thailand is improved but its implementation is not an easy task in coordinating the various authorities with synchronised system. Details can be summarised in three parts: the NSW implementation, level of process integration, and current status of process implementation.

Implementation of the NSW in Thailand

The Customs Department is the lead coordinator for planning and implementation of the NSW. The key national stakeholders for successful implementation are government agencies and industries. The Electronics Transactions Act (ETA), the Digital Signatures Act, and the Evidence Act are the legal framework for a successful NSW, which are implemented to support electronic documents and processing.

The Customs Department, the core agency, is electronically linked with customs and the NSW. For other government agencies, there are 36 non-core agencies related to the implementation, 18 of them are electronically linked with customs and the NSW (the Excise Department, the Department of Foreign Trade, and the Industrial Estate Authority Thailand, amongst others) while the rest are not. Amongst the unlinked agencies, 12 agencies committed to connect electronically in 2014 and the others still have no due date. Table 8 compares the progress of implementation of the NSW between 2012 and 2014, noted that the results in 2012 present the progress of NSW implementation of government agencies, signed memorandums of understanding with the Customs Department, while the 2014 results explain the level of integration of each government agency with customs and the NSW.

Table 4.5: Implementation of National Single Window in 2012 and 2014

Item		Compared Results	
		Already signed MOU in 2012	Link with Customs and NSW in 2014
Core Agency			
1	Thai Customs Department	Yes	Yes
Other Agencies			
2	Department of Foreign Trade	Yes	Yes
3	Industrial Estate Authority of Thailand	Yes	Yes
4	Department of Industrial Work	Yes	Yes
5	Department of Livestock Development	Yes	Yes
6	Excise Department	Yes	Yes
7	Office of the Board of Investment	Yes	Yes
8	Department of Fisheries	Yes	Yes
9	Department of Energy Business	Yes	Yes
10	Food and Drug Administration	Yes	Yes
11	Office of the Cane and Sugar Board	Yes	Yes
12	National Bureau of Agricultural Commodity and Food Standard	Yes	Yes
13	Department of Land Transport	Yes	Yes
14	Fine Arts Department	Yes	Yes
15	Royal Forest Department	Yes	Yes
16	Office of Rubber Replanting Aid Fund	Yes	Yes
17	Port Authority of Thailand	No (2012–2013)	Yes
18	Revenue Department	No	Yes
19	Defence Industry Department	Yes	Yes
20	Department of Internal Trade	Yes	No (in May 2014)
21	Office of the National Broadcasting and Telecommunications and Commission	No (2012–2013)	No (in May 2014)
22	Department of Mineral Fuels	Yes	No (in June 2014)
23	Department of Provincial Administration	Yes	No (in June 2014)
24	Department of Medical Sciences	Yes	No (in June 2014)
25	Department of Mineral Resources	No (2012–2013)	No (in June 2014)
26	Department of Primary Industries and Mines	Yes	No (in July 2014)
27	Electrical and Electronic Institute	Yes	No (in July 2014)
28	Department of National Park Wildlife and Plant Conservation	Yes	No (in August 2014)
29	Office of Atoms for Peace	Yes	No (in 2014)
30	Department of Agriculture	Yes	No (in 2014)
31	Airport of Thailand Public Co. Ltd.	No (2012–2013)	No (in 2014)
32	Thai Industrial Standard Institute	No (2012–2013)	No
33	Department of Civil Aviation	No (2012–2013)	No
34	Thai Chamber of Commerce and Board of Trade of Thailand	No (2012–2013)	No
35	Federation of Thai Industries	No (2012–2013)	No
36	Department of Disease Control	NA	No
37	Marine Department	No (2012–2013)	NA

*Note:*MOU = memorandum of understanding; NA = not available; NSW = National Single Window.

Source: TDRI (2012) and questionnaire results (2014).

Level of process integration

For process integration, the Customs Department's system is interfaced with the Single Window, and its Single Window provides an electronic facility for the process of interchange of permit application and issuance, interchange of permits in declaration clearance, and coordination of goods inspection. However, the Customs Department's system is only interfaced with the Single Window for the coordination of fees payments.

Most government agencies that are involved with the real sector and national revenue, have interfaced their owned systems with the Single Window in every process. Agencies include the Excise Department, the Defence Industry Department, the Department of Fisheries, the Royal Forest Department, the Department of Industrial Work, the Department of Livestock Development, the Office of the Board of Investment, the Department of Land Transport, the Revenue Department, the Port Authority of Thailand, and the Food and Drug Administration.

There are 58 major ports and border posts in Thailand with full operational integration with NSW since 2008.

Current status of NSW implementation processes

Document simplification and harmonisation following the WCO data model, cross-border data exchange, communication and sensitisation on NSW, and publication of regulations and requirements are key processes that are in progress for implementation, while preparation and planning, process analysis, simplification and harmonisation of processes and documents, single window rollout, user testing, staff training, and provision of helpdesk are completed.

Information technology (IT) infrastructure implementation is now completed such as systems for trader, electronic manifest submission, electronic goods declaration, electronic payment of duties or taxes, amongst others. Furthermore, common inspection scheduling of customs and other government agencies is coordinated manually and automatically with the NSW.

For level of simplification and harmonisation, the results from 12 respondents show that the Industrial Estate Authority of Thailand and Office of the Board of Investment have simplified the documents completely while none of OGAs have completed the implementation of harmonisation process. Moreover, the Department of Agriculture and Department of Mineral Resources have not done the document and process simplification.

For linking with the ASEAN Single Window (ASW), message format and data elements of manifest and goods declaration are consistent with the ASW guidelines.

Planned activities for fully operationalising the NSW

The Customs Department states ways forward to improve the NSW in Thailand as follows:

- Improve the quality of national standard data set for import, export, and logistics
- Increase participation in the single window environment and expand its paperless service nationwide
- Revise relevant laws and regulations to enable the electronic single window in a paperless environment
- Enhance cross-border data links with foreign single window systems

4.2.3 Trade Repository

In order to develop trade facilitation, the Thai government gives priority to the National Trade Repository (NTR) system

The NTR implementation is developed independently from the NSW and customs. Thailand has begun to develop the NTR, which is mainly implemented by the Department of Trade Negotiation, Ministry of Commerce, since this agency collects information about trade, trade measures and regulations, and trade facilitation, while other relevant government agencies provide supporting trade information.

Following the measured status of the NTR, most NTR features, such as HS codes and tariff information, national customs rules and regulations, import-export prohibition and restriction, among others, have been in the process of system

development and their English translation manuals are already prepared. It is not planned to provide information about exchange rates in the NTR system.

Thailand is in the process of developing the NTR, which was partially operational at the end of 2014 and can be accessed on the NTR website at www.thailandntr.com.

However, the next stage of the NTR, is a well-organised plan, involving secure budget planning and new trade measures notification, for system maintenance. The Department of Trade Negotiation plans to set up a meeting to discuss sharing new trade measures and future budget planning when the established stage of NTR is completed.

3.3 Key implementation bottlenecks analysis

The respondents from the Customs Department and Department of Trade Negotiation provided information about bottlenecks related to the implementation of the NSW and NTR as follows.

The regulations, especially for NSW implementation, are the impediment. The restriction involving electronic permits is that electronic signatures are still not allowed and the draft Regulation of the Office of the Prime Minister on National Single Window for Import, Export, Transit, and Logistics is not approved yet. Hence, it is necessary to have laws and regulations that allow relevant sectors to submit and approve documents by electronic means. Further, the Customs Department has identified many legal barriers and the process of amending the regulation is lengthy.

Planning, especially budget planning, is another aspect that should be improved. For the NSW, the problem of coordinated budgets among relevant agencies still exists since there is no plan for a synchronised budget. Further, coordination between relevant government agencies is a significant problem for NSW development in Thailand. For the NTR, budget planning and resources allocation for system maintenance for the next stage of implementation is not clear.

The third aspect the NTR is the translation of all legislation into English before being published. Finally, the plan of connecting all NTRs with the ASEAN Trade Repository (ATR) is still unclear, especially in terms of an implementation time frame, and practical coordination is also difficult.

3.4. Key recommendations

From the consultations with the Customs Department and Department of Trade Negotiation, the main problems in implementing trade facilitation on the NSW and the NTR are the coordination problem between government agencies, domestic legal barriers, and an unclear plan for regional connectivity.

It is important to improve the coordination among government agencies to implement the NSW accordingly to the plan. Currently, some agencies have their own systems interfaced with the NSW but some product items interfaced with the NSW but some product items of OGAs are not registered in the system, thus, some processes, for example, permit submissions are done manually.

The improvement of linkage between the IT infrastructure and legal arrangement is also required for trade facilitation. At present, some agencies, such as the Thai Chamber of Commerce and the Board of Trade of Thailand, have difficulties in legal arrangement for the approval of real electronic permit for customs. This leads to the inconvenient operations such as the requirement of non-electronic authorized signatures for some documents. Therefore, the approval of the draft Regulation on National Single Window for Import, Export, Transit and Logistics would be helpful for NSW implementation.

Finally, in order to connect with the ATR, ASEAN should start developing the architecture so that ASEAN member states (AMSs) can link their completed NTRs with the ATR in a timely manner. Moreover, ASEAN should set up a time frame for all member states to regularly update their NTRs.

4. Investment Liberalisation in Thailand

4.1 ASEAN agreements on investment liberalisation in Thailand

4.1.1. Development of ASEAN agreements on investment liberalisation

Since free flows of investment and capital are considered to be one of the significant influences on ASEAN's competitiveness enhancement by attracting foreign direct investment (FDI), the framework agreement on the ASEAN Investment Area (AIA) 1988 and the ASEAN Investment Guarantee Agreement

(IGA) 1987 are called for review, and then the main strategic approach encompassed the establishment of the ASEAN Comprehensive Investment Agreement (ACIA) in 2009. Under the ACIA, the four key pillars are investment protection, facilitation and cooperation, promotion and awareness, and liberalisation.

Since the main objectives of the ACIA are to create a free and open investment regime and to achieve economic integration, different actions are required to achieve the goals of the different pillars. Investment protection aims to enhance protection for all investors and their investments to be covered under the comprehensive agreement. The goal of investment facilitation and cooperation is leading to more transparent, consistent, and predictable investment rules, policies, and procedures, while investment promotion and awareness intend to promote ASEAN as an integrated investment area and production network. Investment liberalisation plans to progressively liberalise investment regimes of AMSs to achieve free and open investment by 2015.

Among these four pillars, this report focuses on investment liberalisation. In order to encourage free flow of capital, ASEAN should pay attention to strengthening capital market development and integration, and allowing greater capital mobility. Investment liberalisation allows greater capital mobility by moving or relaxing restrictions on capital flow to support foreign direct investment and initiatives to promote capital market development in ASEAN.

Therefore, this report attempts to examine the level of investment liberalisation of Thailand under the ACIA and compare it with national legislation. Then, this report provides the implementation bottlenecks after consultation with the Board of Investment of Thailand (BOI), including policy recommendations toward a successful AEC Blueprint.

4.1.2. Thailand's investment liberalisation procedures

Under the ACIA, ASEAN investors and foreign-owned ASEAN-based investors have the rights to invest in sectors which each member state is ready to liberalise. Besides, the ACIA removes or relaxes investment restrictions in the previous commitments under the AIA. Moreover, sharing readiness of the economy and the benefits of liberalisation among member states, allowing sufficient safeguards against potential macroeconomic instability and systemic risks, and

ensuring the consistency of liberalisation in member states' national agendas are considered for investment liberalisation under the ACIA.

Each member state can reserve specific sectors that are not ready to open up for other nations by submitting a reservation list²⁰ to the ASEAN secretariat for the AIA council's endorsement within 6 months of signing the ACIA. The national treatment rules (NT rules) are allowed for investing in sectors excluded from the reservation list.

According to Article 2 of the ACIA, guiding principles of investment liberalisation for Thailand are as follows.

- Provide investment liberalisation, protection, investment promotion and facilitation
- Allow progressive liberalisation of investment with a view towards achieving a free and open investment environment in region
- Benefit investors and their investments based in ASEAN
- Maintain and accord preferential treatment among member states
- No back-tracking of commitments is made under the AIA agreement and the ASEAN IGA
- Grant special and differential treatment and other flexibilities to member states depending on their level of development and sectoral sensitivities
- Offer reciprocal treatment in the enjoyment of concessions among member states where appropriate
- Accommodate expansion of scope of this agreement to cover other sectors in the future

²⁰ A reservation list, known as 'negative list approach', indicates the reserved sectors that each member state does not allow to invest liberally.

For investment liberalisation in Thailand, this agreement shall apply to the following sectors:

- (1) Manufacturing
- (2) Agriculture
- (3) Fishery
- (4) Forestry
- (5) Mining and quarrying
- (6) Services incidental to these five sectors above
- (7) Other sectors that may be agreed upon by all AMSs

However, Thailand also has the reservation list, which uses the Foreign Business Act B.E. 2542 as a principal law and other supplementary laws. Hence, the enforcement of Thailand's reservation list is equal to the current regime.

Furthermore, the ACIA shall apply to the measures adopted or maintained by a member state relating to investors and investments of investors of any other member state. FDI, portfolio investment, and less than 10 percent of ownership participation are included in the agreement.

On the contrary, the ACIA shall not apply to taxation measures, government subsidies or grants, government procurement, services supplied in the exercise of governmental authority by the relevant body of member states, and measures adopted or maintained by member states affecting trade in services under the AFAS.

4.2 Regulations and agreements related to investment liberalisation in Thailand²¹

The Foreign Business Act B.E. 2542 and the Thailand–Australia Free Trade Agreement (TAFTA) are essential for investment measures in Thailand as national treatment rules. According to Pupphavesa, W. (2008), the main idea of these regulation and agreement are described in this section.

4.2.1. Foreign Business Act B.E. 2542 (1999)

The most important law governing alien-controlled businesses is the Foreign Business Act 1999, which replaced the Alien Business Law (National Executive

²¹ This section is mainly based on TDRI (2010).

Council Announcement No. 281) of 1972. Before the introduction of the Alien Business Law in 1972, foreigners were permitted to do business in Thailand with few restrictions. The 1972 law classified businesses into three main categories, each with different foreign ownership restrictions. This law applied to all businesses except public utilities, finance, and the media.

The Foreign Business Act guarantees most favoured nation (MFN) treatment for all except United States investors, who are covered by the 1968 Treaty of Amity and Economic Relations between the Kingdom of Thailand and the United States of America. The act maintains the three business categories as mentioned above, but the list of businesses in each category are changed. Businesses listed in category 1 (or list 1) are absolutely prohibited to foreigners²² unless an exception is stipulated in a special law or treaty. These include mass media, rice and animal husbandry, and other resource-based businesses. Those businesses that appear in the second category (or list 2) concern national security or safety, or are involved with local art, culture, handicrafts, or natural resources and the environment. Foreigners are not permitted to start new businesses listed in this category unless they obtain special permission from the minister with the approval of the Cabinet. Category Three (or list 3) contains businesses that the government believe are not yet ‘competitive’ and thus, are vulnerable to foreign competition. These include mining, salt farming, forestry, fishery, professionals services, and all services unless specified in the Ministerial regulations. Similar to the previous category, foreigners may obtain permission to operate businesses listed under this category. The only difference is that the power to grant permission is vested with the director general and the Foreign Business Committee. To obtain a licence, applicants must be able to convince the concerned local authorities that local firms could not competently conduct the particular investment project.

From the list of businesses in list 1, it would appear that the manufacturing sector is very much open to foreign investment, except for a few businesses that may

²² A ‘foreigner’ refers to a natural person that is not of Thai nationality or a juristic entity that: (1) is established under foreign law; or (2) half or more of its capital is owned by foreigners even if the company is incorporated under Thai law, or (3) half or more of the value of the total capital being invested by foreigners even if more than half the capital is owned by Thai nationals. (The third requirement is effectively a bar on the use of Thai nationals as nominees.)

concern local small and medium enterprises but are not the major interests of foreign transnational companies. The services sector, however, remains relatively closed. Nevertheless, the new law is less restrictive than its predecessor. For example, 21 of the 63 sectors in which foreign majority participation was restricted under the Alien Business Law – including drug manufacture, cement production, and animal feed processing – are no longer restricted under the Foreign Business Act. Certain sectors – construction, broker businesses, auction house – that were classified under the more restrictive list 2 under the old law were moved to list 3. However, the act still imposes minimum capital requirements for foreign investors; B2,000,000 for businesses in list 1 and B3,000,000 for those in list 2 and 3. The new law also eliminated restrictions on the nationality of shareholders and board of directors. The previous Alien Business Law required that the majority of directors and shareholders must be Thai for the company to qualify as a local juristic entity.

Unlike the former Alien Business Law, the new Foreign Business Act imposes more severe criminal sanctions. Any foreigner who operates a business that is prohibited to foreigners according to the law without an Alien Business License is liable for a fine from B100,000 to B1,000,000 and imprisonment of up to 3 years. Furthermore, a Thai national or juristic person that assists a foreigner in circumventing the restrictions stipulated by the Foreign Business Act by means of holding shares as a nominee, or being a nominal owner of the company, shall also be liable for a fine of B100,000 to B1,000,000 and imprisonment of up to 3 years.

4.2.2. Thailand–Australia Free Trade Agreement (TAFTA)

The Investment Chapter of TAFTA also provides investors and their investments with fair and equitable treatment, full protection and security, the free transfer of funds, and ensures that prompt and adequate compensation for any losses incurred through expropriation and strife is received. The scope of the protection is limited only to direct investment. The agreement does not provide for state to private arbitration as in the case of the ASEAN Agreement on the Promotion and Protection of Investment 1987 (amended in 1996) and the Japan–Thailand Economic Partnership Agreement (JTEPA) as will be discussed in greater detail below.

Thailand has made marginal commitments in investment liberalisation. Overall, the TAFTA allows Australian investors to hold up to 60 or 100 percent equity share in a few service sectors, against the Foreign Business Act 1999, Thailand’s main foreign investment law, which prohibits foreign persons from owning a majority equity share in any business in the service sectors. However, most service businesses in the list that Thailand had provided concessions to Australia are relatively minor economic significance, except mining. Table 9 provides the commitments in investment of mining sector under the TAFTA.

Table 9: Commitments in investment of mining sector under TAFTA

Scope	Maximum Australian Ownership	Commitment
<ul style="list-style-type: none"> - Including operations undertaken on land or underwater to obtain minerals from an area by any method or methods - Not including individual mining or panning for minerals 	60%	<ul style="list-style-type: none"> - Concessions must be granted by the Department of Primary Industries and Mines, Ministry of Industry as provided by the Mineral Act B.E. 2510 (1967) as amended by the Mineral Act (No.2) B.E. 2516 (1973), the Mineral Act (No.3) B.E. 2522 (1979), the Mineral Act (No.4) B.E. 2534 (1991), and the Mineral Act (No.5) B.E. 2545 (2002). - At least two fifths of the Board of Directors must be Thai nationals.

Note :TAFTA = Thailand–Australia Free Trade Agreement.

Source: Collated by authors (2014).

4.3. Current status of investment liberalisation in Thailand

To examine the implementation of investment liberalisation in Thailand, this study uses consultation results with the Office of the Board of Investment (BOI), the principal agent for encouraging investment in Thailand and working under the Ministry of Industry.

Since Thailand’s reservation list is subject to relevant domestic laws described in section 2, the ACIA applied to five industries, manufacturing, mining, agriculture, fishery, and forestry, might not be fully liberalised. This section summarises the status of investment liberalisation in each relevant industry by comparing the implementation of the commitment and the actual NT rules.

Table 10 shows the flow of FDI in Thailand from 2005–2013, which is highest in production sector. Although total FDI fluctuated between 2007 and 2011, it has

recovered and has continued to rise since 2012, with almost 20 percent growth in 2013.

Table 10: Foreign Direct Investment (FDI) Flow of Thailand, 2005–2013

(USD million)

Sector	2005	2006	2007	2008	2009	2010	2011	2012	2013
Agriculture	12.61	-2.67	2.74	9.33	7.30	5.71	-2.38	3.19	16.97
Mining	-111.00	256.69	1,307.24	-2.11	640.80	419.23	220.08	39.87	-118.65
Production	3,500.55	5,160.94	4,495.41	4,891.26	2,412.02	4,622.72	4,007.97	4,599.41	5,006.47
Electricity, gas, steam and air conditioning supply	-87.71	353.83	33.20	200.43	221.92	-56.08	44.79	-26.59	41.39
Construction	29.56	-93.79	29.96	-34.04	1.43	27.21	-34.76	-170.24	21.37
Wholesale and Retail	260.27	845.21	-262.52	131.58	344.86	-58.96	610.59	453.34	-2,617.30
Freight and Warehousing	155.05	80.53	-43.31	450.25	118.42	-131.52	222.48	39.83	87.05
Hotels and Restaurants	-29.94	124.97	166.77	-51.34	46.00	113.70	-2.81	27.26	98.53
Financial activities	3,269.45	691.65	2,815.04	1,765.99	274.15	2,279.85	-2,121.48	1,236.24	4,715.84
Real estate	73.28	1,419.06	1,103.16	1,202.53	767.96	984.24	1,078.04	1,014.63	1,663.95
Others	975.96	623.23	1,683.59	-16.77	18.59	905.45	-161.45	3,482.23	3,891.29
Total	8,048.08	9,459.64	11,331.29	8,547.09	4,853.45	9,111.55	3,861.08	10,699.17	12,806.90

Source: Bank of Thailand (Accessed from <http://www2.bot.or.th/statistics>).

4.3.1. Level of liberalisation in manufacturing industry

Domestic law allows most subsectors in manufacturing to be liberalised, except some subsectors exempted in the Foreign Business Act. Table 11 shows the investment measures of the manufacturing industry under the current regime comparing to commitments of the ACIA. The results show that manufacturing investment regimes under the ACIA are similar to the current regime.

Table 11: Comparison of investment measures under current regime and the ACIA: Manufacturing sector

Item	Current Regime	ACIA Commitment
Maximum Foreign Ownership (%)	0–100	0–100
Other Measures	NT rules are subject to the Foreign Business Act B.E. 2542 and other relevant laws.	<ul style="list-style-type: none"> - Most subsectors in manufacturing industry are subject to NT rules. - Subsectors in the reservation list are following the Foreign Business Act B.E. 2542.

Source: Collated by authors (2014).

Table 12 explains the details of investment measures of subsectors in the reservation list. These subsectors can be separated by maximum foreign equity permitted, which indicates the level of investment liberalisation for each subsector. Foreign investment of manufacturing industries in the reservation list is not allowed, except by having permission from relevant authorities in some industries. The maximum ownership permitted for most manufacturing industries in the reservation list is 49–60 percent, but foreign investors need to get permission from the authorities since these industries create cultural and environmental impacts. While investment in some specific industries, such as printing newspapers, making Buddha images, tobacco products, playing cards, and alcoholic beverages, are not allowed with special purpose.

Table 12: Level of investment liberalisation for manufacturing industries in reservation list

Subsector	Maximum Foreign Ownership (%)	Other Measures
1) Subsectors that do not allow any investment of foreign investors		
<ul style="list-style-type: none"> - Printing newspaper - Making or casting Buddha images and monk alms bowls 	49.99	<ul style="list-style-type: none"> - Foreigners are not allowed to have equity participation of 50% or more of registered capital in printing newspaper and making or casting Buddha images. - Other relevant measures are subject to the Foreign Business Act B.E. 2542, ministerial regulations, and administrative guidelines.
<ul style="list-style-type: none"> - Tobacco products - Playing cards - Alcoholic beverages and ethyl alcohol 	0	<ul style="list-style-type: none"> - Foreign investors are not allowed to participate in these subsectors. - Other relevant measures are subject to the Foreign Business Act B.E. 2542, ministerial regulations, and administrative guidelines.
2) Subsectors that do not allow any investment of foreign investors, except by obtaining permission from the Cabinet or Director-General of the Department of Business Development		
<ul style="list-style-type: none"> - Manufacture of sugar cane 	0	<ul style="list-style-type: none"> - Foreigners shall be prohibited from manufacturing sugar from cane, unless permission obtaining from the Cabinet. - Relevant measures are subject to the Foreign Business Act B.E. 2542, ministerial regulations, and administrative guidelines.
<ul style="list-style-type: none"> - Rice milling - Plywood, veneer board, chipboard or hardboard - Lime 	<ul style="list-style-type: none"> - 49.99 - 50 or more (with conditions) 	<ul style="list-style-type: none"> - Foreigners shall be prohibited from rice milling, plywood, veneer board, chipboard or hardboard, and lime, unless following these instructions: <ul style="list-style-type: none"> (i) Obtaining permission from the Director-General of the Department of Business Development with the approval of the Foreign Business Committee

Subsector	Maximum Foreign Ownership (%)	Other Measures
		(ii) The minimum capital used at the commencement of the business operation should not be less than that prescribed by ministerial regulations and shall in no case be less than 3 million baht (iii) Foreigners shall apply for license or certificate from Department of Business Development, Ministry of Commerce (iv) Foreigners shall apply with other conditions prescribed in the Foreign Business Act B.E. 2542 and related laws. - Relevant measures are subject to the Foreign Business Act B.E. 2542, ministerial regulations, and administrative guidelines.
3) Subsectors that do not allow majority investment of foreign investors, except obtaining permission from the Cabinet		
<ul style="list-style-type: none"> - Carved wood - Thai silk yarn, weaving Thai silk or Thai silk pattern printing - Thai musical instruments - Goldware, silverware, nielloware, bronzeware, or lacquerware - Forestry and wood fabrication from natural forest 	49.99 60 (with conditions)	<ul style="list-style-type: none"> - Foreigners shall be prohibited from conducting these businesses, unless permission obtaining from the Cabinet and following other conditions. - Relevant measures are subject to the Foreign Business Act B.E. 2542, ministerial regulations, and administrative guidelines.

Source: Collated by authors (2014).

4.3.2. Level of liberalisation in mining industry

According to the Thailand–Australia Free Trade Agreement (TAFTA), Australian investors are allowed to hold up to 60 percent equity share in mining and quarrying.

Since investors of any other AMS must have the highest level of liberalisation that each member state permits, hence, the maximum equity of foreign investors

under the ACIA for mining and quarrying is 60 percent, as under the TAFTA, but investors need to meet the requirements mentioned in the reservation list (Table 13).

Table 13: Description of investment measures of mining and quarrying

Subsector	Maximum Foreign Ownership (%)	Other Measures
<ul style="list-style-type: none"> - Mining, including rock blasting or crashing - Rock salt mining 	60	<ul style="list-style-type: none"> - Foreign equity participation up to 60% is allowed subject to the following: <ul style="list-style-type: none"> (i) Foreigner who is a juridical person of ASEAN member states must be registered as ordinary partnership, limited partnership, or limited company in Thailand. (ii) A debt to equity ratio of 3:1 or lower shall be maintained. (iii) Concessions must be granted by the Department of Primary Industries and Mines, Ministry of Industry as provided by all the Mineral Acts. (iv) At least two-fifths of the Board of Directors must be Thai nationals. - Relevant measures are subject to the Foreign Business Act B.E. 2542 and administrative guidelines.

Source: Collated by authors (2014).

Table 14 shows that AMSs and Australian investors are permitted similar maximum foreign equity, which is higher than restrictions under the current regime. However, foreign ownership could be allowed to obtain 100 percent in the future since Thailand is likely to experience shortages in this industry.

Table 14: Comparison of maximum foreign equity permitted under current regime, the ACIA, and TAFTA for mining and quarrying sector

Item	Current Regime	ACIA	TAFTA
Maximum Foreign Ownership (%)	49.99	60	60

*Note :*ACIA = ASEAN Comprehensive Investment Agreement, TAFTA = Thailand–Australia Free Trade Agreement.

Source: Collated by authors (2014).

4.3.3. Level of liberalisation in agriculture, fishery, and forestry industries

According to the Foreign Business Act B.E. 2542 the agriculture, fishery, and forestry industries are exempted for special reasons, protecting businesses affecting culture and environment, and protecting domestic businesses. Hence, these three industries are defined in the ACIA reservation list.

According to the AIA, fishery from aquaculture, forestry from forest plantation, and plant cultivation are subsectors defined in List 3 of the Foreign Business Act B.E. 2542, which indicates that Thai people do not have proper operating abilities to compete with foreigners in these three businesses, hence, progressive liberalisation of investment for these three subsectors is required in the AIA. Moreover, these subsectors committed to full liberalisation in 2010 under the AIA, and this commitment still exists in the ACIA. However, all these subsectors could not relax their restrictions on maximum equity permitted or be more liberalised by the end of 2010 as committed. Plant cultivation for onion seed and some types of fishery from aquaculture are the two subsectors that allow maximum foreign equity permitted up to 51 percent with some conditions since 2012, two years later than the due date, while some types of forestry from forest plantation have not become more liberalised until now.

Table 15 shows the different measures for investment of agriculture, fishery, and forestry industries under the Foreign Business Act B.E. 2542 and the ACIA.

Table 15: Investment measures of agriculture, fishery, and forestry industries

Subsector	Maximum Foreign Ownership (%)	Other Measures
1) Subsectors in agricultural industry		
<ul style="list-style-type: none"> - Extraction of Thai herbs - Rice farming, farming, or gardening - Animal farming 	49.99	<ul style="list-style-type: none"> - Foreign investors are not allowed to have equity participation of 50% or more of registered capital in these subsectors for special reasons. - Other relevant measures are subject to the Foreign Business Act B.E. 2542, ministerial regulations, and administrative guidelines.
<ul style="list-style-type: none"> - Plant cultivation, propagation including artificial and transplant 	49.99 50 or more (with conditions)	<ul style="list-style-type: none"> - For purpose of protecting domestic business, foreign equity participation is allowed to obtain 50% or more, subject

Subsector	Maximum Foreign Ownership (%)	Other Measures
propagation, and breeding	51	<p>to the following conditions:</p> <ul style="list-style-type: none"> (i) Obtaining permission from the director-general of the Department of Business Development with the approval of the Foreign Business Committee (ii) The minimum capital used at the commencement of the business operation should not be less than that prescribed by ministerial regulations and shall in no case less than B3,000,000. (iii) Foreigner shall apply for licence or certificate from Department of Business Development, Ministry of Commerce (iv) Foreigner shall apply with other conditions prescribed in the Foreign Business Act B.E. 2542 and related laws. <p>- For onion seed, foreigner is allowed to obtain 51% of registered capital, subject to laws and regulations</p> <p>- Other relevant measures are subject to the Foreign Business Act B.E. 2542, ministerial regulations, and administrative guidelines</p>
<ul style="list-style-type: none"> - Silkworm farming - Salt farming, including underground salt 	<p>49.99</p> <p>50 or more (with conditions)</p>	<p>- Since these subsectors affect art and culture, foreign equity participation is allowed to obtain 50% or more, subject to following conditions:</p> <ul style="list-style-type: none"> (i) Obtaining permission from Ministry of Commerce with the approval of Cabinet and these conditions shall be fulfilled: <ul style="list-style-type: none"> ▪ Not less than 40% of shareholders must be Thai nationals. ▪ Not less than two-fifths of the total number of directors must be Thai nationals. (ii) The minimum capital used at the commencement of the business operation should not be less than that prescribed by ministerial regulations and shall in no case less than B3,000,000

Subsector	Maximum Foreign Ownership (%)	Other Measures
		<p>(iii) Foreigner shall apply for license or certificate from Department of Business Development, Ministry of Commerce</p> <p>(iv) Foreigner shall apply with other conditions prescribed in the Foreign Business Act B.E. 2542 and related laws.</p> <p>- Other relevant measures are subject to the Foreign Business Act B.E. 2542, ministerial regulations, and administrative guidelines.</p>
2) Subsectors in fishery industry		
<p>- Fishery for aquatic animals in Thai waters and within Thailand's exclusive economic zone</p>	<p>49.99</p>	<p>- Foreign investors are not allowed to have equity participation of 50% or more of registered capital in this subsector for special reasons.</p> <p>- Other relevant measures are subject to the Foreign Business Act B.E. 2542, ministerial regulations, and administrative guidelines.</p>
<p>- Fishery, specifically aquaculture</p>	<p>49.99 50 or more (with conditions) 51</p>	<p>- For purpose of protection domestic business, foreign equity participation is allowed to obtain 50% or more, subject to following conditions:</p> <p>(i) Obtaining permission from the director-general of the Department of Business Development with the approval of the Foreign Business Committee.</p> <p>(ii) The minimum capital used at the commencement of the business operation should not be less than that prescribed by ministerial regulations and shall in no case less than B3,000,000.</p> <p>(iii) Foreigner shall apply for license or certificate from Department of Business Development, Ministry of Commerce.</p> <p>(iv) Foreigner shall apply with other conditions prescribed in the Foreign Business Act B.E. 2542 and related laws.</p> <p>- For the culture of tuna deep sea cage and</p>

Subsector	Maximum Foreign Ownership (%)	Other Measures
		<p>indigenous breeding spiny lobsters, foreigner is allowed to obtain up to 51% of registered capital, subject to laws and regulations.</p> <p>- Other relevant measures are subject to the Foreign Business Act B.E. 2542, ministerial regulations, and administrative guidelines.</p>
3) Subsectors in forestry industry		
- Forestry and wood fabrication from natural forest	49.99	<p>- Any foreign investors are not allowed to have equity participation of 50% or more of registered capital for special reasons.</p> <p>- Other relevant measures are subject to the Foreign Business Act B.E. 2542, ministerial regulations, and administrative guidelines.</p>
- Forestry from forest plantation	49.99 50 or more (with conditions)	<p>- For purpose of protection domestic business, foreign equity participation is allowed to obtain 50% or more, subject to following conditions:</p> <p>(i) Obtaining permission from the director-general of the Department of Business Development with the approval of the Foreign Business Committee.</p> <p>(ii) The minimum capital used at the commencement of the business operation should not be less than that prescribed by ministerial regulations and shall in no case less than B3,000,000.</p> <p>(iii) Foreigner shall apply for licence or certificate from Department of Business Development, Ministry of Commerce.</p> <p>(iv) Foreigner shall apply with other conditions prescribed in the Foreign Business Act B.E. 2542 and related laws.</p> <p>- Other relevant measures are subject to the Foreign Business Act B.E. 2542, ministerial regulations, and administrative guidelines.</p>

Source: Collated by authors (2014).

4.3.4. Future plan for investment liberalisation

From the investigation, investment in most sectors is already liberalised except those sectors in the reservation list. Mining and quarrying is the most progressive in the reservation list due to the shortage of mining industry in Thailand. Hence, more liberalisation on investment in this business could take place.

Since investment liberalisation is difficult to implement for other sectors in the reservation list, the BOI has no plan to implement the liberalisation in other sectors but proceed with some sectors committed in the AIA and the ACIA, which are plant cultivation, fishery from aquaculture, and forestry from forest plantation. From the current status, the implementation of investment liberalisation of plant cultivation and fishery from the aquaculture business are accomplished as committed in these agreements, thus, the BOI has to keep on with the investment liberalisation of forestry from forest plantation and plan to be more liberalised as committed in 2015.

4.4. Key implementation bottlenecks: Analysis and recommendations

According to the interview with the Board of Investment of Thailand (BOI), a few sectors are committed to be liberalised under the ACIA, thus, investment liberalisation mostly relies on Thailand's current regime. Due to a few committed sectors, there are a few implementation bottlenecks that mostly come from Thai legislation.

According to the Section 190 of the Constitution of the Kingdom of Thailand B.E. 2550 (2007), before the conclusion of a treaty with other countries or international organisations that will immensely affect Thailand's economic or social security, the council of ministers must provide information to the public, conduct public consultation, and inform the National Assembly. Moreover, prior to give consent or to be bound, the council of ministers shall facilitate the public to get access to the details of such treaty. This public hearing process caused the delay in the investment liberalisation of protected industries listed in the Foreign Business Act B.E. 2542. For example, the investment liberalisation agreement in plant cultivation for onion seed and some types of fishery from aquaculture has become effective since 2012, 2 years after the due date of the commitment under the AIA.

Therefore, investment liberalisation is essential in the long term; however, changing investment laws, regulations, and policies has to deal with the problem of political instability that is difficult to solve. Political instability is another drawback to implementation since ministers and high-ranking government officials often change and the performance of some government officials is stagnant. In addition, each AMS has different landscapes and purposes so that the implementation of liberalisation measures for some sensitive sectors is impractical. In Thailand, the manufacturing sector tends to be liberalised to increase efficiency. However law enforcement and corruption problems – such as bribery or illegal payment – still exist and distort the private sector’s costs.

From the consultations, investment liberalisation will benefit from investment facilitation, while investment promotion is another mechanism that leads to liberalisation. Therefore, our recommendations for implementation are involved with investment facilitation and promotion, as follows.

To begin, the related government agencies should increase their effectiveness and efficiencies in processing registration, authorisation, and permit formalities.

Then, to improve the investment promotion regime in Thailand, the recommendations for the BOI are as follows.

- The BOI should focus more on the business sectors, which are closely matched with the needs of the Thai economy or complement domestic business to enhance competitiveness in the global market. To achieve this target, the BOI needs to be able to identify the gaps or missing links in the domestic business sectors.
- The BOI should also focus more on attracting investment that will cause high value-added (including highly skilled and technology transfer) to the Thai economy, rather than generate employment only.
- The BOI has a broad focus across the manufacturing and trade services to attract foreign direct investment. Its investment promotion policies indicate the priority sectors, including agricultural activities and agricultural products, projects related to technological and human resource development, public utilities, infrastructure and basic services, environmental protection and conservation, and targeted industries. Clearly,

it is considered to be too broad and not clear, and lack targeted industries. Therefore, the focus areas should be reconsidered and revised.

- The BOI should build links between foreign investors and domestic research and development capabilities to attract investment, apart from the existing incentives. The database on research and development resources (such as human skills and academic and research centres) should also be compiled and up to date to provide information for the investment decisions.

5. MRA on Professional Services and Mobility of Skilled Labour in Thailand

According to the AEC Blueprint, the mobility of skilled labour is engaged in trade in goods, services, and investment to facilitate the free flow of skilled labour for supporting the free flow of goods, services, and investment.

The Mutual Recognition Arrangement (MRA) of professional services is established for facilitating the free flow of services by promoting the free flow of skilled labour. To facilitate the flow of foreign skilled labour in ASEAN, the completed and implemented MRAs will enable the professional service suppliers certified or registered by the relevant authorities in their home countries to be mutually recognised by the signatory member states. Furthermore, the free movement of skilled labour under the AEC Blueprint aims to allow for managed mobility or facilitated entry for the movement of natural persons engaged in trade in goods, services, and investment.

For ASEAN to be a single market, the ASEAN Framework Agreement on Services (AFAS) is implemented for promoting the free flow of service and skilled labour in ASEAN. The free flow of skilled labour under the AEC Blueprint aims to facilitate the movement of natural persons engaged in trade in goods, services, and investment.

This paper provides the current status of skilled labour movement and analyses the implementation of MRA on some professional services in Thailand. The bottlenecks and ways forward for implementing an ASEAN MRA are also included.

5.1. Current status for movement of skilled labour

5.1.1. Commitments under the movement of natural persons (MNP)

The objective of commitments under the MNP is to facilitate the movement of natural persons engaged in trade in goods, services, and investment between ASEAN member states.

For trade in goods, ASEAN established the Agreement on Movement of Natural Persons to provide the measures and requirements of employment and length of stay for each professional. For trade in services, the MNP is directly involved with the temporary movement of persons pursuant to Mode 4 under the AFAS.

At present, the commitments under the MNP of Thailand are applied for business investor (BV) and intra-corporate transferee. The 25 professional groups engaged in the commitments are engineer, computer expertise, R&D, rental services, advertisement, marketing research, management, agricultural services, fishery services, forestry services, mining services, consultant, medical device repairing, translator, convention services, telecommunication services, mass communication on radio and television, construction, education, environment, financial services, health services, hotel services, sports, and transportation.

For the business investor, who enters or stays in Thailand for the purpose of participating in business negotiations or meetings, establishing an investment or setting up a commercial presence, or other relevant activities, he or she is allowed to stay for not more than 90 days and the length can be extended to not more than 1 year.

For the intra-corporate transferee, the commitments are applied only in some managerial positions, such as executives, managers, and professionals. These managerial professionals can stay in Thailand for not more than 1 year and the length can be extended 3 times with the maximum 1 year each.

5.1.2. Related regulations and policies on mobility of skilled labour

The three main laws related to MNP are the Foreign Business Act B.E. 2542, the Migration Act B.E. 2522, and the Alien Employment Act B.E. 2521. The relevant authorities for their enforcement are the Department of Consular Affairs, the Immigration Bureau, and the Department of Employment.

5.2. Implementation of MRA in Thailand

As mentioned earlier, MRA is directly involved with the free flow of services by facilitating the free flow of skilled labour. In order to address the gaps in the qualification requirements across AMSs, the MRA was established to set up accreditation procedures and mechanisms for equivalency, while recognising the inter-country differences in education and training, experience, and licencing requirements for the practice of professions.

The ASEAN MRA currently is applied for eight professional services (engineers, architects, medical practitioners, dental practitioners, nurses, accountants, surveyors, and professionals in tourism services).

For the preparation for MRA implementation, most regulations, both directly and indirectly associated with the professional services, have been collected and revised. Moreover, the regulations regarding engineering services, architectural services, and nursing services have already been translated into English.

5.2.1 Engineering services

Recently, there is progress in the implementation of the MRA on engineering services. In particular, the ASEAN Chartered Professional Engineer (ACPE) Registration Regulation B.E. 2527 has been enforced in conformity with the regional agreement. In addition, the Regulation of Council of Engineers on the registration fee for members and other fees charged to members or others will be enacted.

According to the Council of Engineer, there are currently 211 foreign engineers working in Thailand. However, there is still no process to register the Registered Foreign Professional Engineers (RFPEs) under the MRA. The assessment statement has been approved by the ASEAN Chartered Professional Engineering Coordinating Committee (ACPECC). The system and regulations used to organise the RFPEs are

being formulated. There is no agency responsible for data collection and the data on numbers of Thai engineers working overseas are not available.

The cost of registration as an ACPE is USD100, while the cost of registration as an RFPE is still being considered. The benefit of using the ASEAN MRA is that the process of registering as an RFPE may be easier, such as the exemption of a written examination.

5.2.2. Architectural services

Currently, the rules under revision are the draft Ministerial Regulation for Professional Architect and Draft Ministerial Regulation about works in which aliens can participate.

The data on actual movement of professions from a foreign country to Thailand are not available. However, the data from the National Statistical Office (NSO) showed that there were 20,662 Thai architects in Thailand.

Registration cost for ASEAN architects is B1,500 (about USD50) per registration or renewal. The fees to register as an RFPE are B4,000 (about USD133) for registration per project, B2,000 (about USD67) for renewal per project (before expiry date), and B4,000 (about USD133) for renewal per project (after expiry date).

For legal schemes, to work as an ASEAN architect, an architect or practitioner has to meet specific qualifications.²³

Furthermore, to work as an architectural profession in Thailand,²⁴ foreign practitioners need to take a local test for a professional licence, which is usually in

²³ The specific qualifications are as follows:

- (a) completed an accredited or recognised architectural program (5-year program).
- (b) be a registered architect with Architect Council Thailand.
- (c) acquired practical and diversified experience of not less than 10 years of practice of architecture since graduation, of which 5 years shall be after licensure/registration.
- (d) has spent at least 2 years in responsible charge of significant architectural work.
- (e) complied with the Continuing Professional Development (CPD) policy at a satisfactory level.
- (f) obtained certification from the Professional Regulatory Authority (PRA) of the country of origin with no record of serious violation on technical, professional or ethical standards, local and international, for the practice of architecture.
- (g) agrees to be bound by code of professional conduct and ethics.

²⁴ According to the council Rule for Local Collaboration Framework (2013), natural person or juristic person who work as a foreign architect in a local collaboration project must meet the following.

Thai, however, the relevant authority (that is, the Architect Council of Thailand) is considering that restriction as well as the participation level allowed for foreign architects.

5.2.3 Nursing services

There are no foreign nurses (non-ASEAN) working in Thailand, while the number of both ASEAN and Thai nurses is not available. Foreigners can practice nursing services if they have a nursing education and are registered as a professional nurse in their home countries, and passed the national licencing examination (in Thai), and gained a licence to practice from the Thailand Nursing and Midwifery Council.

The main restriction on licencing is that the examination must be done in Thai. Although the Council may consider changing the examination to be in English, Thai language proficiency will be needed to provide nursing services to Thai patients.

5.3. Key bottlenecks on implementation and ways forward

The implementation on MRAs in Thailand is progressing slowly because Thailand has no focal point, inefficient coordination, and inadequate budget allocation from the government.

In particular, some key obstacles on implementing MRAs of professional services and labour mobility in Thailand are as follows.

First, Thailand lacks political commitment to put the agreements into force. It typically has tried to keep the status quo by following what the domestic laws and regulations allow. It is likely that the best Thailand can do is to reduce some steps of the registration process.

(a) be a registered architect with the authority in their host countries (domicile or working) and their registered licence should not be expired at least no fewer than 6 months from the requested date.

(b) have a professional licence or be a registered architect from the authority in their host countries (domicile or working as a professional architect for more than 5 years)

(a) grants a permission from the foreign juristic person who participate in local collaboration project.

(b) has no criminal record and never commits a crime

(c) always be bound by code of professional conduct and ethics

Second, domestic practitioners as well as related government agencies do not recognise the importance of labour mobility from other countries. Some think that the commitments are made by the government leaders, but not by their needs. Therefore, it leads to inefficient coordination in professional bodies and government agencies.

Third, the misunderstanding that the AEC will result in mass labour mobilisation has led to wide-spread panic within Thai society, although it is very far from the truth.

Fourth, some professional bodies complain about no budget allocation from the government to implement the MRAs.

Finally, some stakeholders consider that the benefit of MRAs is marginal. In particular, MRAs are agreements between member countries that specify conditions of certain professions to facilitate the movement at some certain. However, meeting qualifications specified in the MRAs is not an automatic recognition to work in other member countries. In order to work in another member country, ASEAN professionals are also required to meet domestic regulations. For Thailand, the entering policies for ASEAN professionals are complicated (Table 16). Therefore, the mobilisation of skilled labour hardly occurs.

Table 16: Qualifications of skilled professionals in Thailand

Professions	Domestic Laws
Engineering	It is necessary for skilled personnel to work alongside Thai domestic counterparts who have a permission certificate. If working alone, each case must be considered by the Federation of Professions for the ability to comprehend the professional standards and relevant regulations in the Thai language.
Architecture	
Nursing	The test is conducted in the Thai language.
Dentistry	
Medical	
Accounting	Accountants must be able to do accounting in the Thai language and possess understanding of Thai accounting standards and tax laws. Auditors must be able to audit and write reports in Thai.
Surveillance	The permit is not available for non-Thai citizens.

Source: Authors.

The ways forward to accelerate the implementation process of MRAs of professional services and labour mobility are as follows.

Firstly, the importance of MRA provisions as well as free flow of professional service providers must be addressed to encourage stronger commitments among AMS.

Secondly, information on the implementation progress of all AMSs should be informed regularly to each professional in order to signal that the progress is monitored consistently.

Finally, to generate more than marginal benefits, the MRAs may focus more on common competency standards for professionals, as mentioned in the MRA for tourism professionals, in addition to facilitating the registration process.

6. Standards and Conformance in Thailand

The AEC Blueprint, which aims to promote a single market and production base, reduces tariff and non-tariff barriers to harmonise standards, impose technical regulations, and provide conformity assessment procedures among AMSs. To achieve such goals, the blueprint has set up guidelines for actions such as aligning standards with international practices, implementing MRAs, promoting transparency in standards development and application, and strengthening post-market surveillance systems.

This study examines five out of eight products to be implemented on harmonisation standards, technical regulations, and conformity assessment procedures. The five products are automotive, cosmetics, electrical and electronic equipment (EEE), medical devices, and pharmaceutical. The agencies stated in Table 17 are responsible for standards and conformance of these five products.

Table 17: Agencies responsible for implementation on standards and conformance

Products	Agencies
Automotive	Thai Industrial Standards Institute (TISI)
Cosmetics	Cosmetic Control Group, Food and Drug Administration (FDA)
Electrical & Electronic Equipment (EEE)	Thai Industrial Standards Institute (TISI)
Medical Devices	Medical Devices Control Division, Food and Drug Administration
Pharmaceutical	Drug Control Division, Food and Drug Administration (FDA)

Source: TDRI (2012).

6.1 Current status for standards and conformance

Table 18 shows the status of the five priority integration sectors' activities according to Ramesh (2012).

Table 18: Status of activities of the priority integration sectors

Sector	Standards	Technical harmonisation/ Regulations	Conformity assessment procedures
Automotive	Harmonisation of national standards and technical requirements/regulations with UNECE Regulations of the 1958 Agreement.	None	Development of ASEAN MRA for Type Approval of Automotive Products for mutual acceptance and recognition of conformity assessment results issued by Listed Technical Services.
Cosmetics	-	ASEAN Cosmetic Directive (Schedule B – ASEAN Cosmetic Harmonised Regulatory Scheme). Harmonisation of technical requirements for cosmetics ingredients.	ASEAN Cosmetics Testing Laboratory Network.
Electrical and Electronic Equipment	Harmonisation of national standards with IEC standards.	ASEAN Harmonised Electrical and Electronic Equipment Regulatory Regime.	ASEAN Sectoral MRA for Electrical and Electronic Equipment.
Medical Devices	Harmonisation of national standards with ISO standards for medical devices	Development of ASEAN Medical Device Directive	Conformity assessment of medical devices is within the purview of the national regulatory authorities.
Pharmaceuticals	-	Development of guidelines for BA/BE Studies, Variation	ASEAN Sectoral MRA for GMP Inspection of Manufacturers of

Sector	Standards	Technical harmonisation/ Regulations	Conformity assessment procedures
		Guidelines, Stability and Validation Guidelines. Adoption of the ASEAN Common Technical Requirements and ASEAN Common Technical Dossier.	Medicinal Products for mutual acceptance and recognition of GMP certificates issued by Listed Inspection Services.

Source: Adopted from Ramesh, S.V. (2012a). ‘Free Movement of Goods – The Cornerstone of the ASEAN Single Market – Addressing Technical Barriers in ASEAN’ (unpublished).

For national standards on five products, most of them have already been aligned with international standards. For example, the national standards on automotive products have been aligned with UN ECE Regulation of the 1958 Agreement, those on EEE products have been aligned with ISO/IEC, and those on prepared foodstuff have been aligned with CODEX standards. However, some products have just begun to harmonise their products to be aligned with the international standards. For example, national standards on rubber-based products are in the early stage to be aligned with the ISO standards.

Although national standards on some products have been aligned with international standards, those on these products have not completely harmonised. Presently, there are two agreements on technical regulations in AMSs. The first agreement is the Agreement on ASEAN Harmonised Cosmetic Regulatory Scheme, signed on 2 September 2003. The agreement consists of Mutual Recognition Arrangement (MRA) of Product Registration Approvals for Cosmetics (Schedule A) and the ASEAN Cosmetic Directive (ACD) (Schedule B). The ACD applies notification basis on controlled cosmetics. Also, the process of cosmetics control has changed from pre-market control to post-market control. For the implementation process in Thailand, the draft ministerial regulation on notification of control of cosmetics is in the consideration process by the cabinet.

The second agreement is about EEE products, the ASEAN Harmonised Electrical and Electronic Equipment Regulatory Regime (AHEERR). There are three principles on mandatory standards: safety, environment, and Electromagnetic Compatibility (EMC). For the implementation process in Thailand, Thailand has to

revise its regulations and procedures corresponding to the certificate of conformity in order to meet the requirements.

6.2 Implementation of standards and conformance

6.2.1 Automotive

In terms of harmonisation of standards, Thailand's national standards and technical requirements are more than 90 percent aligned with the identified UN ECE regulations. The standards or technical requirements have not been fully adopted since there are deviations of the national standards based on a series of amendments that ASEAN member States refer to or have adopted. In addition, the harmonisation does not include conformity assessment content.

Thailand's domestic regulations mostly conform to international standards because the automotive sector is one of the key national exports. However, the ASEAN MRA for Type Approval of Automotive Products has not yet been ratified since the draft MRA is still in the process of final round of consultation. The draft MRA will be submitted to the Automotive Product Working Group (APWG) for endorsement and to the Legal Division of the ASEAN Secretariat, and is expected to be ratified in 2016.

The listed technical service identification and monitoring for conformity assessment of automotive products still face challenges. There are a limited number of testing laboratories and it requires a large amount of government budget to support the necessary facilities.

6.2.2. Cosmetics

Thailand has fully transposed the provision of the Agreement on the ASEAN Harmonised Cosmetic Regulatory Scheme into the applicable law and regulation since 2008. Thailand's law and regulations on four (out of five) aspects – definitions and scope of cosmetic products, ingredient listing, product claims, and cosmetic good manufacturing practice (GMP), are already similar to the ASEAN Cosmetic Directive. Nevertheless, labelling is the only aspect that is not equivalent to the Directive since labelling in Thailand has additional notification numbers to ease post-market surveillance activities.

On looking at conformity assessment of cosmetics in Thailand, the Bureau of Cosmetic and Hazardous Substances (the designating body) does not appoint any accreditation body to accredit the listed conformity assessment bodies. However, the agency itself provides services for cosmetic and hazardous substances used in public health purposes.

To implement ASEAN technical requirements, there is a link established to ensure regional level commitment. The Thai FDA has a working group that aims to facilitate regulatory bodies in each department.

6.2.3. Electrical & Electronic Equipment (EEE)

All of the domestic applicable regulations have been revised for alignment with the provision of the ASEAN sectoral MRA for EEE. Since the national regulations are already based on IEC standards, further revision is not necessary. Accordingly, the full transposition of the ASEAN MRA provisions for EEE was completed on 1 January 2015.

Out of 121 regionally agreed standards for harmonisation with international standards, only 38 are adopted by Thailand. The bottleneck that delays the adoption of standards is that the development of mandatory standards must be in the Thai language by the approval of relevant technical committee. In order to solve the problem, Thailand should amend the existing laws to allow the adoption of standards in English.

6.2.4. Medical devices

At the moment, the number of standards that have been agreed on at the regional level to be harmonised with international standards is still inconclusive since the ASEAN Medical Device Directive (AMDD) has not been officially implemented. For conformity assessment of medical devices, the government agency plans to outsource listed conformity assessment bodies to carry out conformity assessment of medical devices in the near future. On the other hand, Thailand has not fully implemented ASEAN technical requirements. The country is still in the process of adopting the same risk-based classification system as in the AMDD.

6.2.5. Pharmaceutical

In terms of keeping up with regional regulations and agreements, Thailand's pharmaceutical sector has performed well. In particular, Thailand signed the MRA

on pharmaceutical products, namely the ASEAN Sectoral Mutual Recognition Arrangement (MRA) on Good Manufacturing Practice (GMP) Inspection of manufacturers of medicinal products, on 10 April 2009. Moreover, the country intends to follow the pharmaceutical registration scheme. Currently, Thailand also applies other international systems due to the lack of regional guidelines in some topics. However, a limited capacity to review the pharmaceutical registration and to follow the new GMP standard for manufacturers is an obstacle.

Thailand has made some progress on conformity assessment. Thai FDA has provided regular training programs for newly recruited GMP inspectors. Nonetheless, the sector still needs more inspectors to implement an effective system.

6.3. Key bottlenecks on implementation and ways forward

Thailand's implementation of standards and conformance faces bottlenecks at both national and regional levels.

At the national level, the key bottlenecks are as follows.

First, Section 190 of the Constitution, B.E. 2550, indicates that the laws related to Thailand's international trade and investment treaty procedures have to follow the process of public hearing. Therefore, the process on MRA approval will take longer.

Second, the lack of laboratories for inspection or certification due to a limitation in budget, as well as a scarcity on technical assistance, also causes a delay in implementation.

Finally, the country's limited capacity on technology and regulatory bodies exacerbates the issue. The technologies used in the medical device industry or enterprises in the cosmetic industry are not developed enough to comply with all standards. Also, Thailand's regulatory agencies have a heavy workload.

At the regional level, the key bottleneck is the differences in requirements or approval process required by law in each country. Because of unclear rules or procedures, their implementation is difficult in some fields – such as the creation of manuals and preparation on post-market surveillance. A lack of regional guidelines in some topics also accounts for an implementation delay in the pharmaceutical sector.

The ways forward to accelerate the standards and conformance implementation process are as follows.

Firstly, the government should provide a budget to related government agencies or conformity assessment bodies to enhance their capacities, such as through developing testing equipment and human skills. The institutional capacities will be the key to strong regulation enforcement on standards and conformance.

Secondly, the government should encourage the private sector or stakeholders to get more involved in the implementation process. For example, the private sector should be encouraged to take part in the process of revising or reviewing national standards as members of the committee. In addition, the related government agencies should build stronger coordination in order to smooth the working process.

Lastly, ASEAN should narrow the development gap among AMSs. Testing laboratory capacities, for example, can be on four different levels in these countries. Consequently, it is harder to accept common testing standards.

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