

CoST Country Study: Thailand



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Executive Summary

CoST is a public infrastructure transparency and accountability initiative. As a multi-stakeholder initiative, CoST works with government, industry and civil society to support the routine disclosure of public infrastructure project information into the public domain. This information is subjected to regular 'spot checks' to assess the accuracy of information disclosed, compliance with transparency requirements and performance or progress of the project. Discrepancies are highlighted in simple language that is easy for citizens to understand and which they can use to demand improvements in public infrastructure procurement and delivery.

CoST Thailand was established in March 2015 when the Cabinet issued a resolution assigning the State Enterprise Policy Office (SEPO) to pilot the programme. It has since grown from application on only one mega project under the Airports of Thailand (AOT) to include projects under the Comptroller General's Department (CGD) and SEPO. Disclosure has commenced and is ongoing, facilitated by a number of separate online platforms. CoST Thailand expects to continue scaling up the programme over the coming years.

In partnership with the UK Government's Foreign and Commonwealth Office (FCO), CoST is conducting four country studies in Indonesia, Malaysia, Thailand, and Vietnam to assess the applicability and viability of the initiative in each country. The purpose of this study is to understand the:

- Key characteristics of public infrastructure investment and governance in Thailand;
- Public infrastructure transparency policy and practice (baseline) in Thailand; and
- Scope for improving public infrastructure transparency and accountability, specifically the CoST value-add and potential challenges/barriers to implementation, in Thailand.

Thailand is one of the great development success stories. It achieved upper middle income status in less than a generation; however, average growth rates have fallen from 7.5% (1986-1996) to 3.5% (2005-2015). Over the past decade, Thailand has gone through a period of political instability which has resulted in a decline in investment from both the public and private sectors. The country is now trapped in the middle income bracket and has yet to transition to high income country status. In order to achieve this aspiration, the country must maintain an annual growth rate of over 5% for the next 10 years.

The government has subsequently proposed significant investments in infrastructure, including a number of large mega infrastructure projects, valued at 4.5 trillion THB (US$127.4 billion) (33% of Thailand's 2015 GDP), primarily in transportation, energy, sanitation, telecommunication and education. The bulk of these investments (85%) will be made through State-Owned Enterprises (SOEs) who are widely considered to be inefficient or poorly managed. Greater transparency could help address the underlying causes of such inefficiency and mismanagement, and additionally help drive greater private sector investment.

The construction sector is characterised by long and complex supply chains which provide many opportunities for collusion or corruption. In Thailand, construction companies are often intrinsically linked with politicians. This often results in preferential treatment in assessing or awarding contracts. The lack of a level playing field will have lasting negative effect on the sector's competitiveness, including higher prices, lower quality and loss of sector expertise over time.

According to the World Bank's Worldwide Governance Index (WGI), governance in Thailand has significantly deteriorated between 1996 and 2014. In particular, the control of corruption has weakened. This is corroborated by Transparency International's (TI) Corruption Perceptions Index (CPI) which ranks Thailand in the bottom half of countries worldwide and below the world average. Freedoms of speech, association, assembly and press are also limited in Thailand. In spite of this, there have been various anti-corruption protests and calls to clean up politics in Thailand in recent years. As a result, when the military Junta came into power, anti-corruption measures were expressly included as a key part of its agenda. This presents an opportunity for CoST and the government to align their approaches to achieve a common goal. Additionally, CoST can help develop civil society capacity and promote media integrity.

In 2015, the military government via the National Anti-Corruption Committee, confirmed the applicability of leading international initiatives focused on transparency and good governance, namely CoST and the Open Government Partnership (OGP), the Extractives Industry Transparency Initiative (EITI) and TI's Integrity Pacts (IP). Three of these initiatives (CoST, OGP, IP) adopt a fully inclusive and participatory process between government and civil society. However, multi-stakeholder working was deemed inappropriate for EITI given the controversial nature of petroleum concessions and gold and potassium mining (including environmental, health and other social concerns) in Thailand.

Nonetheless, there is an existing framework for transparency in Thailand; there are at least eight laws focussed on transparency and access to information, and this provides a useful starting point for CoST. Under this framework, 58% of CoST transparency requirements are currently mandated by law, but 56 SOEs are exempt from at least two major transparency laws. This is of significant concern given the crucial role played by SOEs in delivering the government's ambitious infrastructure investment plans. CoST has an active role to play; firstly, CoST should work to expand existing transparency requirements to meet CoST best practice and secondly, to include additional data points pertinent to the local context such as road safety statistics. Finally, CoST must include a concerted effort to include all SOEs responsible for major infrastructure.

Thailand has advanced information systems; in relation to infrastructure transparency, dedicated CoST disclosure portals have already been created under AOT, SEPO and CGD. Disclosure on a number of projects is already underway and will be scaled up over time. A unifying, single window platform for CoST disclosure will also be developed to further improve ease of access to information. These portals are important milestones for CoST as internet penetration in Thailand is high, with over 42.7% of the population having access to the internet. This means that CoST disclosure could potentially reach up to 29,078,158 people in Thailand. However, targeted efforts should also be made to engage the wider population, including more traditional disclosure channels such as TV, radio or print media.

Compliance with existing regulations is low. This is due in part to weak enforcement, and also to the lack of incentives or penalties that encourage public officials to comply. At the project level, the average compliance rate with legal requirements is 27%. Compliance with CoST requirements is even lower at 24%. Some projects only achieve 9% compliance with legal requirements. Even the best performing SOE only achieves 48% compliance with legal requirements and 40% compliance with CoST requirements. The lack of capacity and poor understanding of legal requirements including what can or cannot be disclosed are some of the underlying reasons for this poor performance. CoST can help build up capacity to increase compliance, and work with all relevant stakeholders to promote the establishment of new transparency norms.

Chapter 7 outlines 12 key recommendations for CoST implementation in Thailand. These focus on strengthening transparency requirements including uniformed application of requirements to include SOEs, building up disclosure compliance through improved monitoring and enforcement, as well as the introduction of incentives for good performance. Multiple disclosure channels should also be used. Finally, CoST must work to grow civic space and enable constructive dialogue between government, industry and civil society.

CoST Country Study: Thailand

Acronyms

ACT	Anti-Corruption Organisation of Thailand
ADB	Asian Development Bank
AEC	ASEAN Economic Community
AEDP	Alternative Energy Development Plan
AOT	Airports of Thailand
ARL	Airport Rail Link
ASEAN	Association of Southeast Asian Nations
BMA	Bangkok Metropolitan Administration
BOQ	Bill of Quantities
BTS	Bangkok Transit System
CGD	Comptroller General's Department
CPI	Corruption Perceptions Index
CSO	Civil Society Organisation
EGA	Electronic Government Agency
EGAT	Electricity Generating Authority of Thailand
EIA	Environmental Impact Assessment
EIT	Engineering Institute of Thailand
EITI	Extractive Industries Transparency Initiative
EXAT	Expressway Authority of Thailand
FCO	Foreign and Commonwealth Office
FIW	Freedom in the World
GDP	Gross Domestic Product
HFI	Human Freedom Index
IDS	Infrastructure Data Standard
IP	Integrity Pacts
KPI	Key Performance Indicator
LNG	Liquefied Natural Gas
MCOT	Mass Communication Organization of Thailand
MEA	Metropolitan Electricity Authority
MRT	Mass Rapid Transit
MRTA	Mass Rapid Transit Authority
MSG	Multi-Stakeholder Group
NACC	National Anti-Corruption Commission
NBTC	National Broadcasting and Telecommunications Commission
NCPO	National Council for Peace and Order
NESDB	Office of National Economic and Social Development Board
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Co-Operation and Development
OIA 1997	Official Information Act 1997
OIC	Office of Information Commission
ONEP	Office of Natural Resources and Environmental Policy and Planning
OTP	Office of Transport and Traffic Policy and Planning (OTP)
PACC	Public Sector Anti-Corruption Commission
PDP	Power Development Plan
PE	Procuring Entity
PEA	Provincial Electricity Authority
PM	Prime Minister
PMC	Project management consultants
PPP	Public–Private Partnership
QS	Quantity surveyor
ROPMeP 2006	Regulations of the Office of the Prime Minister (PM) on Electronics Procurement 2006
ROPMP 1992	Regulations of the Office of the Prime Minister (PM) on Procurement 1992
SCB EIC	Siam Commercial Bank Economic Intelligence Centre
SEA	Southeast Asia
SEC	Stock Exchange Commission
SEPO	State Enterprise Policy Office
SOE	State Owned Enterprise
SRT	State Railway of Thailand
TDRI	Thailand Development Research Institute
TEU	Twenty-Foot Equivalent Unit
THB	Thai Baht
TI	Transparency International

TOE	Ton Oil Equivalent
TOR	Terms of Reference
WEF	World Economic Forum
WGI	Worldwide Governance Index
WHO	World Health Organization

Introduction

CoST

CoST is a public infrastructure transparency and accountability initiative. As a multi-stakeholder initiative, CoST works with government, industry and civil society to support the routine disclosure of public infrastructure project information into the public domain. This information is subjected to regular 'spot checks' to assess the accuracy of information disclosed, compliance with transparency requirements and performance or progress of the project. Discrepancies are highlighted in simple language that is easy for citizens to understand and which they can use to demand improvements in public infrastructure procurement and delivery[1].

CoST Thailand was established in March 2015 when the Cabinet issued a resolution assigning the State Enterprise Policy Office (SEPO) to pilot the programme. The Airports of Thailand (AOT) 62 billion THB (US$1.76 billion) Suvarnabhumi International Airport extension mega project (Phase 2) (2010-2019) was chosen as the first CoST project. The project is currently in the procurement phase and consists of five contracts; disclosure has already begun via the AOT website[2] and construction is due to start in 2017.

In the two years since CoST Thailand was established, the National Anti-Corruption Committee[3], headed by the Prime Minister (PM), has sought to expand the scope of CoST implementation. The Government has developed a long-term mega construction investment plan and the transparency of these projects is a key concern of the Thai population. The successful application of CoST on the AOT mega project has paved the way for wider CoST implementation on high value, strategic projects in Thailand.

In 2017, the Cabinet approved a new operational framework for CoST. Under this framework, the CoST Thailand Multi-Stakeholder Group (MSG) will be chaired by the Permanent Secretary of the Ministry of Finance. There will be two Vice Chairs, the Director General of the Comptroller General's Department (CGD) and the Chairman of the Anti-Corruption Organisation of Thailand (ACT). Other members will include the National Economic and Social Development Board (NESDB), SEPO, Transparency Thailand, Good Governance for Social Development and the Environment Institute, Engineering Institute of Thailand, Association of Siamese Architects and the Association of Thai ICT Industry. According to the Cabinet approved framework, CoST Thailand is mandated upon all infrastructure projects valued at over 1 million THB (US$28,000) and will extend to those projects that have a significant impact on the public.

As a result of this expansion, CGD and SEPO have established CoST disclosure portals for their respective infrastructure projects. CGD currently discloses on three pilot projects, whilst the SEPO website refers to two projects. CoST Thailand is currently working to develop a

[1] For more information, please refer to the CoST Factsheet.

[2] Please visit https://costaot.airportthai.co.th/th/

[3] National Anti-Corruption Committee is an ad-hoc policy-level anti-corruption committee of the Executive body. It was established by the National Council for Peace and Order (NCPO) in 2015. The Committee is served by the Public Sector Anti-Corruption Commission (PACC), an anti-corruption body under the Ministry of Justice.

It is not to be confused with the National Anti-Corruption Commission (NACC) which was established in 1999 as a quasi–judicial body, of which the commissioners are selected and appointed by the Senate.

single-window platform to enable citizens to access information across all projects and all Procuring Entities (PEs) through a single website.

Background to the Thailand Study

Southeast Asia (SEA) infrastructure investment has risen sharply in recent years to remedy historical underinvestment and accommodate the explosion in demand (McKinsey and Company, 2011). The biggest demand is expected in transport and energy, "the sectors most critical to supporting heightened economic activity". In light of this rapid growth, now, more than ever, public infrastructure investment in the region must be managed effectively and efficiently. Therefore, CoST is conducting four country studies in Indonesia, Malaysia, Thailand, and Vietnam to determine the current levels of public infrastructure transparency and accountability in each country. These studies will feed into an overall SEA regional study, to inform the extent to which CoST can add value.

The project is funded by the Foreign and Commonwealth Office (FCO), UK Government, through the Southeast Asia Prosperity Fund.

Objectives of the Thailand Study

The purpose of this study is to understand the:

- Key characteristics of public infrastructure investment and governance in Thailand;
- Public infrastructure transparency policy and practice (baseline) in Thailand; and
- Scope for improving public infrastructure transparency and accountability, specifically the CoST value-add and potential challenges/barriers to implementation, in Thailand.

Scope and Structure of this Study

The Thailand study is based on a comprehensive literature review, in addition to the consolidation of primary and secondary data to determine the transparency baseline. Conclusions and recommendations have been drawn from the findings to highlight the value add of and way forward for CoST. More information on the research approach, limitations, and assumptions can be found in the Methodology section.

This study begins with some key information about the Thai economy to set the context and is followed by an overview of public infrastructure investment and delivery in Thailand. Subsequent sections discuss governance and transparency – both policy and practice in public infrastructure – in Thailand. Throughout the study, key enablers and barriers will be assessed to identify whether CoST has a role in Thailand. Recommendations on this will be presented in the conclusion.

Methodology

Key Definitions

Public infrastructure is defined as infrastructure that is either owned by the public or is for public use, with the exception of defence and public security. The reason for this exception is that they relate to national security and are not subject to the same standards of disclosure as other public infrastructure.

Disclosure refers to the publication of information relating to public infrastructure projects, with the goal of increasing transparency. *Proactive disclosure* is when information is published routinely as a matter of course without any request for information having been made. *Reactive disclosure* is when information is provided in response to a request for information.

State Owned Enterprise (SOE) is defined in Thailand's Budget Procedures Act 1959 as a company in which the government owns more than 50% of its capital.

Public Private Partnerships (PPPs) are defined in Thailand's Private Investments in State Undertakings Act 2013, as private investment projects which government agencies are responsible for and have a legal obligation to deliver/perform. Often undertaken by way of license or concession.

Literature Review

The wealth of online literature on the subject of governance and the public infrastructure sector in Thailand means that an online literature review serves as the core methodology to answer the research questions in this country study. Triangulation was used to maximise the accuracy and validity of information sources on governance, public infrastructure investment, and transparency and disclosure in theory and in practice. The following types of online resources were used for this purpose in this study:

- Official sources: Ministry of Transport, Ministry of Energy, SEPO, CGD, NESDB, SOEs; National Investment Plans such as the Transport Infrastructure Development Strategy 2015-2022, the Power Development Plan 2015 – 2036 and the PPP Strategic Plan 2015-2019;
- News centres: Thaipublica.org and Isranews.org (online investigative news centres), The Nation and the Prachachat Turakij (mainstream business newspapers); and,
- International organisations: World Bank, IMD World Competitiveness Centre Transparency International (TI).

Sample selection

Chapter 6 features an assessment of compliance with disclosure requirements for 20 public infrastructure projects in Thailand. The sample infrastructure projects are drawn from project owners projected to be the largest infrastructure investors over the next decade, according to the government's long-term investment plans. According to the percentage share of infrastructure investment, these are:

- State Railway of Thailand (SRT) – 33.4%
- Mass Rapid Transit (MRT) – 18.8%

- Department of Highways and the Department of Rural Roads – 13.2%
- Airports of Thailand (AOT) – 3%

These projects were drawn from SOE websites; project selection was based on a minimum threshold of THB 5 million (USD$142,000) per project. On a more practical note, the availability of information was also used as a determining factor. With regards to the project assessment, this approach may have increased the average level of compliance for projects. In practice, the level of compliance is likely to be lower; however, the approach was selected to highlight the potential for disclosure.

Compliance is measured against two benchmarks, existing Thai regulations and the CoST Infrastructure Data Standard (IDS). As mentioned above, the primary source of data for assessing compliance was SOE websites.

Thailand in Context

Thailand in Context

One of the great development success stories

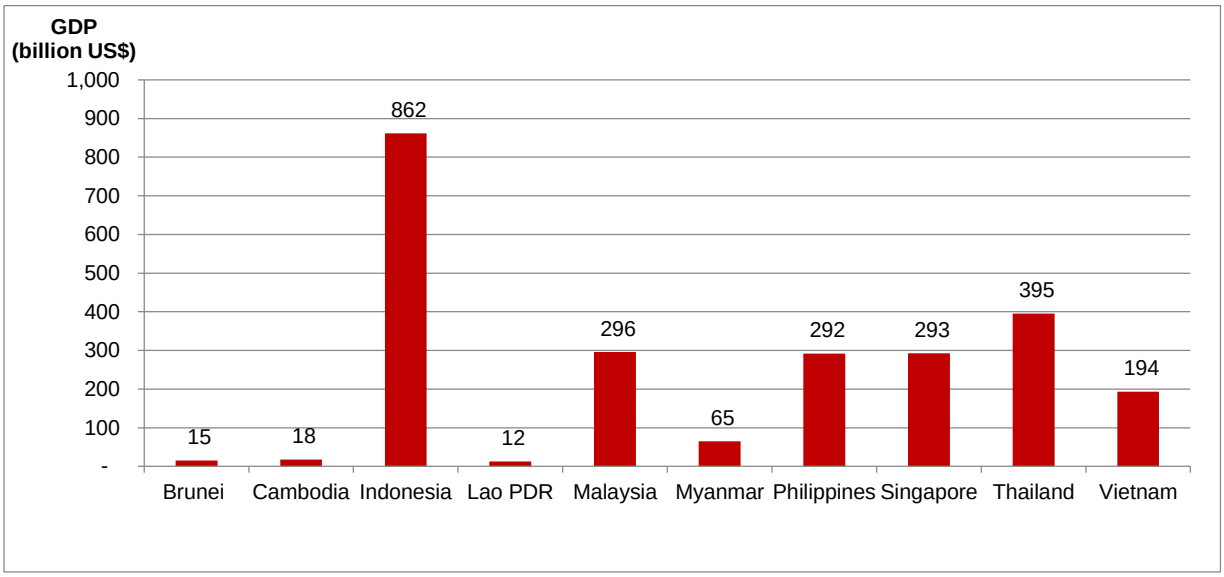
Thailand is a constitutional monarchy and the only country in SEA to have avoided colonial rule. Since 1947, the military has primarily held power with just a few occasions in which the country had a democratically elected government. Since the rise of Thaksin Shinawatra in 2001, Thailand has been embroiled in a ceaseless political conflict between the pro- and anti-Thaksin factions. Most recently in 2014, the military Junta government seized power from the Yingluck Shinawatra administration in a coup d'état. Following historic corruption allegations against the Yingluck administration, the military Junta pledged to make anti-corruption one of its foremost priorities. Given that the military Junta is not an elected government, progress on this issue would help strengthen trust and provide legitimacy. As a transparency and accountability initiative, CoST is well placed to support anti-corruption efforts.

Thailand is one of the great development success stories. In 2015, Thailand had a total Gross Domestic Product (GDP) of $US395 billion (see Figure 1.1) making it the 27th largest economy in the world and the second largest in the Association of Southeast Asian Nations (ASEAN) (World Bank, 2016). It is also ASEAN's fourth richest country in terms of GDP per capita at US$5,816 (see Figure 1.2) (World Bank, 2016). Smart economic policies have led to sustained growth and poverty reduction; as a result, in 2011, Thailand achieved upper middle income status in less than a generation. Of note, poverty has declined substantially (by 56%) over the last 30 years to a rate of just 11% in 2014 (World Bank, 2016). However, poverty and inequality continue to pose significant challenges. Although Thailand has made great strides and boasts an unbelievably low unemployment rate of less than 1% (Ibid.), wealth and income inequality remain significant as highlighted by the 2013 GINI Index Score of 37.85[4] (Ibid.). This will further be exacerbated with the decline in the average growth rates, which have fallen from 7.5% (1986-1996) to 3.5% (2005-2015) (Ibid.). Please see Figure 1.3 for Thailand's growth rate over the last 25 years.

An ambitious reform program has commenced to raise Thailand's long-term growth path and achieve high-income status. Targeting economic stability, human capital, equal economic opportunities, environmental sustainability, competitiveness, and effective government bureaucracies, progress on reforms has already been made. The plans include the implementation of multi-year large public infrastructure projects and the establishment of a State Enterprise Policy Committee to improve governance of SOEs.

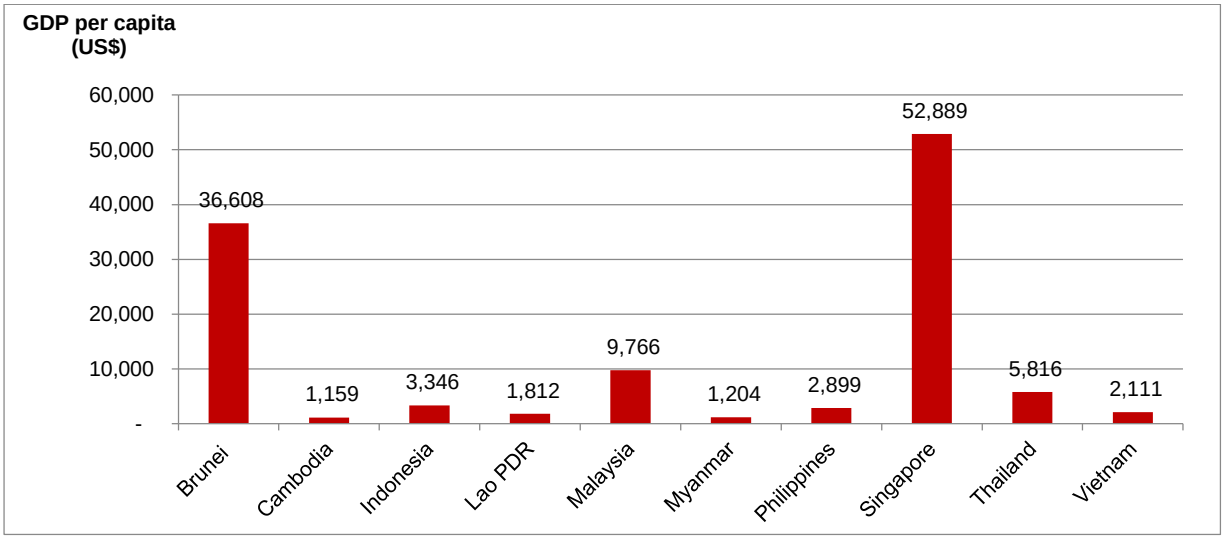
[4] With regards to the GINI Index, 0 represents perfect equality and 100 represents perfect inequality.

Figure 1.1 Total GDP of ASEAN countries in 2015



Source: World Bank (2016)

Figure 1.2 GDP per capita of ASEAN countries in 2015



Source: World Bank (2016)

Figure 1.3 GDP Growth (annual %)

Source: World Bank (2016)

Table 1 below shows a country comparison of some key indicators that are relevant to this study. Of the four countries targeted in this project, Thailand's Gross National Income (GNI) per capita is second only to Malaysia. Furthermore, Thailand had the lowest growth rate (2.8%) in 2015.

Table 1: Country Comparison of Key Economic Indicators

DATA	Thailand	Malaysia	Indonesia	Vietnam
OECD Status (2016)	Non-OECD	Non-OECD	Non-OECD	Non-OECD
Economy (2016)	Upper-middle income	Upper-middle income	Lower-middle income	Lower-middle income
GNI per capita Atlas method (2015) (US$)	5,620.00	10,570.00	3,440.00	1,980.00
Net ODA received (% of GNI) (2014)[5]	0.1	0	0	2.4
GDP Growth (annual %) (2015)	2.8	5	4.8	6.7
Global Competitiveness (1: Best, 140: Worst) (2015-2016)	32	18	37	56

Source: OECD, World Bank, and World Economic Forum (WEF)

In terms of its economy, Thailand is predominantly an agricultural country with over 40% of land used for agricultural purposes (Central Intelligence Agency, 2016). However, over the

[5] Net ODA (Official Development Assistance) refers to government aid, excluding loans and credits for military purposes.

last generation, the trend is shifting towards manufacturing and services. As of 2014, 32.2% of the labour force is in the agricultural sector, 16.7% in the manufacturing sector and 51.1% in the services sector (especially financial sector).

Additional Information on Characteristics of Thailand

Thailand's population currently stands at almost 68 million people (World Bank, 2016). Although the population increased dramatically over the past few decades, the population growth rate has since shrunk considerably in the last few years to just 0.32% in 2016 (Central Intelligence Agency, 2016). This means that Thailand's population is aging rapidly; in 2015, over 10% of the population was aged over 65 years old (World Bank, 2016) and the figure is expected to almost double by 2030 (CNBC, 2013). It is projected that this aging population will result in the decline of the labour force and subsequent economic slowdown to at most 3% GDP (SCB EIC, 2015). Increased infrastructure investment could help to maintain economic growth in the long-run (Ibid).

Thailand is a country with a land area of 513,120 square kilometers (sq. km) and the country is divided into 76 districts, plus the capital Bangkok and Pattaya. Geographically, it is subdivided into the Northern, Northeastern, Eastern, Central and Southern regions. Its administrative and economic capital is Bangkok, which is also the most populous city where more than 6.8 million citizens reside (National Statistics Office, 2015). Thailand shares borders with four countries – Myanmar in the Western part (2,416 km long), Laos in the Northeastern part (1,845 km long), Cambodia in the Eastern part (817 km long) and Malaysia in the Southern part (595 km long).

Thailand is bordered by the two seas, the Gulf of Thailand in the Southeastern part and the Andaman Sea in the Southwestern part, totaling 3,219 km of coastlines (see Figure 2). Chao Phraya and Mekong are two major rivers among nearly 40 rivers in Thailand. Chao Phraya is formed by the confluence of four smaller rivers in the North of the country, from which it flows 372 km through Bangkok to the Gulf of Thailand. Its watershed drains an area of 157,924 sq. km or 30% of the country's land (UNESCO, 2003). It serves as the source of water supply for agriculture and drinking water; it is also the route of merchandise and passenger transportation. In 2013, 65,314 small feeder ships and 61,985 passenger ships transporting 13.8 million passengers passed through Bangkok via Chao Phraya (Marine Department, 2013). With regards to the Mekong, it is 4,350 km long flowing from Tibetan Plateau across six countries: China, Myanmar, Laos, Thailand, Cambodia and Vietnam. The Mekong river also forms 976 km of the Laotian-Thai border. Apart from its significance for cross-border trades, the Mekong Basin is an important source of electricity and irrigation for its riparian countries as it hosts 364 dams.

Figure 2: Map of Thailand

Source: Central Intelligence Agency (2016)

Recommendation 1

Although Bangkok is the economic and administrative capital and CoST operations are based in the city, efforts should be made to engage the wider demographic including rural populations.

Public Infrastructure Investment and Delivery in Thailand

Public Infrastructure Investment and Delivery in Thailand

Public infrastructure investment, 2015-2036

Table 2: Public infrastructure investment between 2015 and 2036

Sectors	Managers	Number of projects	Public investment		Share
			Billion THB	Billion US$	
Transport	Ministry of Transport*, ***	75	3,198	90.7	71%
Power	Ministry of Energy**	16	1,185	33	26%
Sanitation	Bangkok Metropolitan and the Wastewater Management Authority***	10	56	1.6	1%
Education	Ministry of Education***	6	26	0.7	1%
Telecoms	Ministry of Digital Economy and Society***	1	13	0.4	0.3%
Total		**108**	**4,479**	**127.1**	**100%**

Source: Ministry of Transport, SEPO, Ministry of Energy, SCB EIC, Prachachat and TDRI

* Transport Infrastructure Development Strategy (2015-2022) and Master Plan of Chao Phraya River Crossing Bridges Construction in Bangkok and its vicinities (2017-2031)
** PDP 2015 (2015-2036) and Gas plan 2015 (2015-2036)
*** PPP Strategic Plan (2015-2019)

Although Thailand progressed to upper middle income status in less than a generation, it is now trapped in the middle income bracket and has yet to transition to high income country status. According to the NESDB, the country must maintain an annual growth rate of over 5% for the next 10 years in order to achieve its developed country ambition (Post Today, 2015). As a result, NESDB recommends the government accelerates the 5 trillion THB (US$141.8 billion) infrastructure development currently planned for the 2015-2036 period (see Table 2). Although demand for infrastructure is high, in the last decade Thailand has underinvested in these five key areas (transport, power, sanitation, education and telecoms). Nonetheless, the government now has an ambitious infrastructure investment plan focussing on these five sectors of infrastructure. As a result, this sector focus is mirrored in our report.

Over the next two decades, planned investment in infrastructure is valued at 4.5 trillion THB (US$127.4 billion)[6], equivalent to 33% of Thailand's 2015 GDP. The primary focus will be on transport (71% share of planned investment), whilst the second largest share of investment (26%) is directed at the power sector. Together, these two sectors account for 97% of the total infrastructure investment (see Table 2). Of these investments, 85% will be made through SOEs, 14% by central government agencies and 1% by the local administration, specifically Bangkok Metropolitan.

[6] This investment does not include the water management plan for agriculture and industries, which is a major funding source for water infrastructure development.

In recent times, infrastructure mega projects have been a high priority. As with Yingluck's government, Prayuht's government (Junta-led government) has proposed a number of mega projects such as the development of high speed trains. Instead of large-scale borrowing, the current government plans to finance these mega projects through the government's annual budget and especially PPP investment. The government intends to keep the debt-GDP ratio lower than 50% (Manager Online, 2015); the actual ratio is 42.75%, as of June 2016 (Fiscal Policy Office, 2016). As a result, Thailand is entering into the era of mega project construction in which more than 2 trillion THB (US$56 billion) will be spent as part of the infrastructure development plan, especially in transportation. The size and scale of these investments demand precise and meticulous management at every stage of every project; CoST could be a useful tool for monitoring progress and developments.

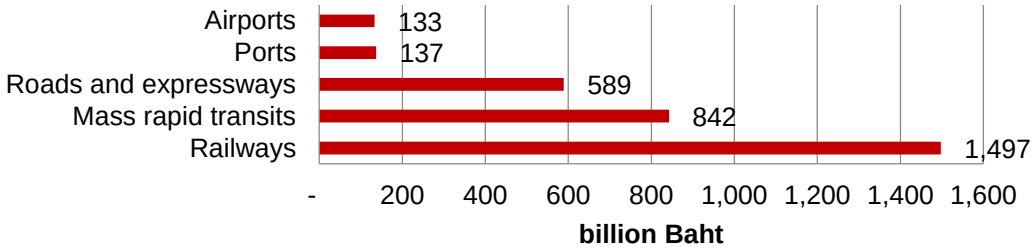
Case Study 1: Bang Pakong Dam (2007)

The Bang Pakong Dam (5.2 billion THB (US$147.5 million)) was built in 2007 to prevent seawater from entering the Bang Pakong River during the dry season. However, after the project's completion, water from the dam flooded pig farms near the riverbank, washed dung down from these farms and contaminated the water in the dam. Moreover, since the level of water behind the dam dropped dramatically, the riverbank began collapsing which caused further problems to the local environment and agriculture. To prevent these problems, the authorities opened the dam's water gates, allowing seawater to flow in and out naturally as if there was no dam at all. As a consequence, the Bang Pakong Dam did not fulfill its main objective, which was to prevent seawater from contaminating fresh water in the river (Sanabboon, 2008). Approximately 5.2 billion THB was wasted on infrastructure that should never have been built in the first place.

Transport (3.2 trillion THB (US$56 billion))

Over the next two decades, Thailand aims to invest 3.2 trillion THB (US$90 billion) in transport. Of this figure, 1.9 trillion THB (US$53 billion) was announced as part of the Transport Infrastructure Development Strategy (2015-2022). Featuring 75 construction projects, this strategy aims to build and extend strategic infrastructure including railways, Mass Rapid Transit (MRT), inter-city roads and expressways, airports and ports (see Figure 3.1). Most of the projects are under the management of SOEs, within the Ministry of Transport. This will be the country's biggest reform of transportation and logistics infrastructure.

Figure 3.1: Transport Infrastructure Development Strategy (2015-2022)



Source: Office of Transport and Traffic Policy and Planning (OTP), Ministry of Transport (2015)

Railway upgrades (1.5 trillion THB (US$43 billion))

The Thai railways were established in 1896. In Thailand, rail transport is an unpopular mode of transport due to the poor safety and hygiene of its trains. Since 1896, no additional routes have been developed (The Nation, 2013). The Transport Infrastructure Development Strategy 2015-2022 includes almost 1.5 trillion THB investment in railways. Currently, the inter-city rail network covers approximately 4,000 km, of which 93% is a single-track line of 1-meter wide. This means that the inbound and outbound trains have to slow down and wait for rail-track switching. For this reason, the government has approved 17 double-track rail projects, accounting for 27% of railway construction projects. According to the Siam Commercial Bank Economic Intelligence Center (SCB EIC), three projects of double-track railways are planned to start in the next three years (SCB EIC, 2015).

Five new routes of medium and high-speed lines are also planned to cover approximately 2,560 km of rail networks. These routes require a budget totaling 1.1 trillion THB (US$30 billion) or 73% of the total railway investment. The high-speed trains are an ambitious project which, though garnering some support, remain controversial. Despite improving travel-time efficiency and supporting the expansion of cities, their necessity and value for money are questioned.

The State Railway of Thailand (SRT) is one of the worst performing SOEs financially; since 2008[7], SEPO has consistently rated SRT's financial performance as 'critical'. In 2015, SRT had a cumulative deficit of 104 billion THB (US$ 3 billion) which was 31% share of its total capital (SEPO, 2015). Due to this deficit, the SRT is not able to invest in railway upgrades. Given its poor performance record, there are also doubts over the SRT's capacity to manage such a large amount of money. In July 2016, the Thailand Development Research Institute (TDRI) criticised government for not disclosing sufficient information to the public on the costs of these projects which will ultimately be financed by the taxpayer (The Nation, 2016).

The government is preparing a PPP investment plan whereby the private sector will invest 13% of the budget in two high-speed train projects: Bangkok-Rayong (150 billion THB or US$4 billion) and Bangkok-Hua Hin (95 billion THB or US$2.7 billion). Nonetheless, there has been no sign of the restructuring of the SRT.

Mass Rapid Transit (MRT) (842 billion THB (US$24 billion))

Traffic congestion has been a major challenge for large cities in Thailand for at least two decades; the situation is especially serious in Bangkok. According to 2016 TomTom Traffic Index, Bangkok is the world's second most traffic-congested city after Mexico City (TomTom, 2016).

Since 1999, the MRT grown in popularity as a means of transportation for the residents of Bangkok and its vicinities. Until 2015, Bangkok only had three lines of urban rail transit: the elevated Bangkok Transit System (BTS) (known as Sky train), (underground) MRT and the Airport Rail Link (ARL). Approximately one million passengers use these lines each day; however, this only reflects 6.4% of public transport passengers. The majority of public transport passengers use public buses (BTS Group, 2015).

[7] According to the data available via SEPO's database (http://www.sepo.go.th).

Over the next 12 years, the number of urban rail transit users in Bangkok is expected to rise to over 7.7 million per day. To meet this demand, the Ministry of Transport has proposed the construction of 11 new lines valued at 842 billion THB (US$24 billion) which encompasses 353 km of tracks in total. The 11 lines are split into 18 projects, of which five are underway and due to be completed in 2019; a further four projects are expected to start before 2018. The Mass Rapid Transit Authority (MRTA), an SOE of the Ministry of Transport, is the principal manager of these construction projects. The Bangkok Metropolitan Administration (BMA) will manage three monorail and tramway projects, a railway system which is separate from the MRT or BTS.

Bangkok's tramway and monorail is of interest to many administrators of other cities and local businesses. At least three local administrations – Phuket (South of Thailand), Khonkaen and Nakhon Ratchasima (Northeast of Thailand) – have carried out consultations with the local population and businesses to assess whether similar projects could be delivered in these localities. Furthermore, these administrations have sought financial support from the government. However, the projects have not been included in the data represented in this report as they are not yet confirmed.

Roads and expressways (589 billion THB (US$16 billion))

Thailand has approximately 462,133 roads and many multi-lane highways. There are currently 37 million registered vehicles, which include 20 million motorbikes; there are many millions more vehicles that are unregistered (BBC, 2017). According to the World Health Organization (WHO, 2015), Thailand's roads are the second deadliest in the world. Official figures from the Ministry of Public Health state that 14,059 people were killed on Thai roads and highways in 2012. However, the WHO estimate that 24,237 people were actually killed in the same year; this is 42% higher than the official statistics. One of the reasons cited for the high fatality rate is that there is no inspection of public road infrastructure (Bangkok Post, 2015). Additionally, there is no dedicated lane for motorcyclists and they use pedestrian sidewalks (Ibid.); unsurprisingly, motorcyclists account for 80% of all road-related deaths (BBC, 2017).

Roads and expressways are the primary means of transportation in Bangkok. In 2015, approximately nine million vehicles were registered in Bangkok and the surrounding provinces. However, the existing road system can only accommodate 1.5 million vehicles (approximately 16% of those registered). As a result, congestion is a major issue; it is reported that traffic jams waste close to 100 million BHT worth of fuel on average each day (Bangkok Post, 2016).

In Thailand, buses are a major mode of transportation for people and freight. They are also the most popular means of long distance travel. Between 2011 and 2015, the Transport Company recorded that there were, on average at least 9.3 million passengers on its inter-city buses[8] each year.

The government plans to approve 589 billion THB (US$16 billion) between 2017 and 2021 to fund: construction of roads, expressways and bridges; installation of road traffic signals; and, renovation of bus stations. Approximately 21 mega projects, totalling 28 billion THB (US$794

[8] The Transport Company is an SOE under the regulation of the Ministry of Transport. It is ranked among major inter-cities buses operators in 2007 while its market share is unknown. For more information, please see CA International Information Co.,Ltd. 2009.
การศึกษาสถานภาพและความสามารถในการแข่งขันของธุรกิจการขนส่งผู้โดยสารทางบกอื่น ๆ ที่มีตารางเวลาในประเทศไทย. (in Thai)
http://www.caii-thailand.com/sites/default/files/downloads/DBD1-2.pdf

million), will commence in the next three years. The four public agencies involved in these projects are: Expressway Authority of Thailand (EXAT); Department of Local Roads; and, Department of Highways and the Department of Land Transport.

Ports (137 billion THB (US$3.8 billion))

According to the 2014 World Port Ranking, two of Thailand's ports are ranked among the top 100 in the world in terms of container traffic (American Association of Port Authorities, 2014). These are the ports of Laem Chabang (21st) (East of Thailand) and Bangkok (88th), both situated in the Gulf of Thailand. In 2015, these two ports handled imports and exports totaling 6.8 million and 1.5 million Twenty-Foot Equivalent Units (TEUs). In comparison, Shanghai's port, the world's busiest port, handled 36 million TEUs in the same year.

Thailand's ports face issues of capacity and congestion. Laem Chabang port will have to accommodate nine million TEUs of freight by 2020, which will exceed its current capacity of 8 million TEUs. The Bangkok port capacity of 1.34 million TEUs per year is already being exceeded (SCB EIC, 2015). To tackle this problem, the Port of Thailand plans to expand and upgrade its port infrastructure.

According to the government, Laem Chabang will benefit from construction projects worth 92.9 billion THB (US$2.6 billion) between now and 2023. The extension plan, called Laem Chabang Phase 3, accounts for 94% of this budget. The investment will allow the port to handle imports and exports of more than 18 million TEUs per year, due to be completed in 2021.

In addition to the Port of Thailand's projects, the Marine Department has also been planning to build two new ports in the South of Thailand for a number of years. These projects are – Pak Bara Port (920,000 TEUs) in Stun province, Andaman Sea, and Songkhla Deep-Sea Port (570,000 TEUs) (iCONS, 2011) in the Gulf of Thailand – totaling 18 billion THB (US$510 million). The construction of two ports has been planned for many years. In the case of Pak Bara, it was first proposed in 1996 (Seub Nakhasathien Foundation, 2010) but was postponed several times due to environmental concerns; the port only passed the Environmental Impact Assessment (EIA) in 2007 (Thailand Construction News, 2015). The potential negative impacts of the project include harming Satun'smu Phetara through bio-diversity loss, crop damage, deforestation and water and noise pollution. This is of particular note given that the Satun'smu Phetara is a major source of food for local peoples, and also generates income from tourism. Despite the ongoing concerns regarding environmental and social impacts, the Ministry of Transport stated in 2013, that this project would be a green, environmentally-benign project that would help promote tourism, transport and rail development (Environmental Justice Atlas, 2016).

For Songkhla Deep-Sea Port, the feasibility study was completed in 2009[9]. The port was heavily opposed by the local population as it would result in the resettlement of villages that were over 100 years old. The villagers were not informed or involved in the decision-making process; in addition, the project developer provided false information, claiming that there were no rare marine species, such as dolphins, in the area (Prachatai, 2009). In 2012, the Office of Natural Resources and Environmental Policy and Planning (ONEP) rejected the project,

[9] The Marine Department's website for the Songkhla Deep-Sea Port 2 Project can be found at http://www.songkhla2port.com/index.html

confirming the project would cause a “significant negative impact” to the local community (iCONS, 2012)[10]. In spite of this, the government will go ahead with both port projects.

Airports (133 billion THB (US$3.7 billion))

Thailand has 10 international airports and 25 domestic airports[11]. These are operated by the AOT, an SOE listed on the stock market, and the Department of Airports[12]. Though the AOT only owns six of the 10 international airports, these are the largest of all 10 airports; on the other hand, the Department of Airports owns all domestic airports.

From October 2014 to September 2015, 107 million air passengers traveled through AOT’s six main international airports. The majority of these passengers (88%) passed through the largest of the three international airports: Suvarnabhumi International Airport (46%) and Don Mueang International Airport (29%), both located near Bangkok; and, Phuket International Airport (12%) located in the South of Thailand (AOT, 2015). In comparison, in 2015, the Department of Airports only received 15.6 million air passengers (Department of Airports, 2015).

The fast growth of air travel and air shipment has prompted the government to expand its airports. According to data from AOT, the number of air passengers has increased 175% between 2005 and 2015. However, due to delays to expansion plans, the three largest international airports are already facing capacity issues (see Table 3). For example, the Suvarnabhumi airport expansion plan was approved by the Cabinet in 2010; however, due to AOT management changes and contract cancellations, procurement only began in 2016.

Overall, AOT has allocated 133 billion THB (US$3.7 billion) investment (2016-2021) for three airport expansion projects which are underway. According to SCB EIC, this investment will allow AOT to double the annual capacity of its three main airports to 138 million passengers per year (SCB EIC, 2015). Primarily, this investment focuses on building new passenger buildings. However, the expansion of Suvarnabhumi Airport, which accounts for 75% of the total investment, also includes the building of a new terminal, runway and automated transport system to link the terminals.

[10] ONEP’s official documents relating to the decision on this issue are not publicly available.

[11] This does not include military or private airports.

[12] Please find further information via the Ministry of Transport’s portal on air transportation: http://www.mot.go.th/statmot.html?id=12

Table 3: Over-capacity in Thailand's three top international airports

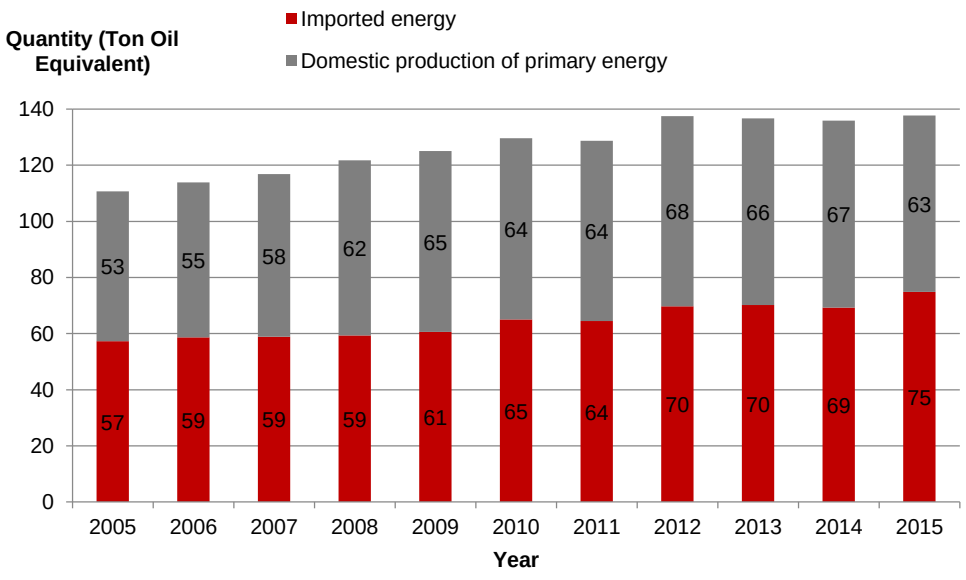
Three largest international airports	Current annual capacity of air passengers (in million) *	Total actual number of air passengers in 2015 (in million) *	New annual capacity of receiving air passengers planned for 2021 (in million) **
Suvarnabhumi	45	52.4	80
Don Mueang	18.5	28.6	40
Phuket	6.5	12.5	18
Total	**70**	**93.5**	**138**

Source: *AOT (2015)[13], **SCB EIC (2015)

Power infrastructure (1.2 billion THB (US$34 million))

Over the past decade, Thailand has consumed between 110 and 140 TOEs (Ton Oil Equivalent) each year (see Figure 3.2). In Thailand, 90% of energy consumption is still based on fossil fuels, especially oil and petroleum. Furthermore, imports account for half of energy consumption. Crude oil imports accounted for 58% of the total import in 2015, followed by coal imports at 19%.

Figure 3.2: Import and domestic production of the general primary energy in Thailand between 2005-2015



Source: Energy Balance of Thailand 2015 Report, Department of Alternative Energy Development and Efficiency

[13] For further information, please see https://airportthai.co.th/main/th/news/632/ทอทดำเนินงานครบ-36-ปี

Thailand needs to increase its power production to sustain economic growth and develop its industries. Between 2015 and 2036, the Ministry of Energy plans to invest 1.2 trillion THB (US$42 billion) in 17 mega projects to build power plants and gas distribution pipelines. Of this investment, 84% will be channeled into the electricity sector, with the remaining funds focusing on gas.

According to the Power Development Plan 2015-2036 (PDP 2015), Thailand must generate 70,355 Megawatt (MW) of electricity to meet demand. Currently, power plants generate 37,612 MW, yet 66% of this existing capacity will be retired by 2036 due to the aging of power plant infrastructure. As such, more than 57,459 MW must be sourced to meet the expected demand for electricity (see Table 4).

Table 4: Capacity of electricity production between 2015-2036

Capacity	2015-2036 without investment (MW)	2015-2036 with investment (MW)
Existing capacity as of 2014	37,612	37,612
Capacity increase given investment	0	57,459
Retired capacity	-24,736	-24,736
Total capacity	**12,876**	**70,335**

Source: PDP 2015

Over the next decade, energy infrastructure will require three new transmission systems and eight coal-fired power plants. The Ministry of Energy has appointed the Electricity Generating Authority of Thailand (EGAT) to undertake these works. The transmission system works have a budget of 600 billion THB (US$17 billion) until 2025 whilst the power plant projects are valued at 295 billion THB (US$8 billion). The largest power plant to be built is the Thepa power plant in Songkhla Province (South of Thailand) with the investment of 150 billion THB (US$4.3 billion). If completed, it will be the largest coal-fired plant in Thailand, and even in ASEAN region, with a capacity of 2,000 MW (Greenpeace Thailand, 2015). However, the coal power plants are heavily contested by the local population and environmental activists who believe there are cleaner means of producing electricity. Previously, many of these protests against their construction have led to violence with some activist leaders being assassinated, such as the murder of Charoen Wat-aksorn in 2004 (see Case Study 2).

Regarding investment in gas infrastructure, the Gas Plan 2015-2036, outlines at least five gas infrastructure development projects. Totaling 189.5 billion THB (US$5.4 billion) of investment, these projects include three gas transmission pipelines, enhancing gas platforms and building a Liquefied Natural Gas (LNG) receiving terminal. The largest project is the construction of the 435-km gas transmission pipelines from Rayong (East of Thailand) to a power plant near Bangkok, with construction valued at 96.5 billion THB (US$2.7 billion) and completion due in 2021. All of these projects are under the management of the gas and petroleum producer and vendor, PTT Public Company Limited, an SOE listed on the stock market.

Thailand's energy consumption will increase by 75% in the next two decades. Thailand is already highly dependent on energy imports, which is expected to grow by 36% between 2013 and 2040 (Sun&Wind Energy, 2016). To address these concerns, renewable energy sources must be developed. The Ministry of Energy's 10-Year Alternative Energy Development Plan (AEDP) targets 25% energy consumption from renewable sources by 2021 (Ministry of

Energy). Currently, only 8% of energy is produced through renewable energy. See Table 5 for the current and targeted renewable energy production.

Table 5: Current and Targeted Renewable Energy Production (2015-2036)

Renewable energy	As of 2015	Target in 2036
Solar cell	1,298.51 MW	6,000 MW
Wind energy	224.47 MW	3,002 MW
Biomass	2,451.82 MW	5,570 MW
Biogas (wastewater/sludge)	311.50 MW	600 MW
Biogas (energy crops)	Pending	680 MW
Waste (municipal solid waste)	65.72 MW	500 MW
Waste (industrial waste)	Pending	50 MW
Small hydro power	142.01 MW	376 MW
Hydro power	Pending	2,906.40 MW*
Total in MW	**4,494.03 MW**	**19,684.40 MW**

Sun&Wind Energy, 2016

In this light, EGAT plans to construct eight hydropower plants, one wind power plant and one solar power station. These power plants will allow for the production of 952 MW of electricity (2016 – 2020) (EGAT, 2015), though, there is no indication of the value of investment for these projects. According to the Energy Report: 100% renewable energy by 2050 (World Wildlife Fund, 2011), Thailand could achieve 100% renewable energy electricity generation by 2050. The study showed the potential of power generation by solar, wind, biogas, and small hydroelectricity sources. The findings conflict with government energy plans that favour fossil fuel power generation as opposed to renewable energy sources (The Nation, 2016).

Until now, the Thai Government has focused on promoting small renewable energy projects primarily to test concepts and gain knowledge. This approach will not be sufficient to achieve the target of 25% share of renewable power by 2021 (Sun&Wind Energy, 2016).

Case Study 2: Bo Nok and Hin Krud power plants and the murder of Charoen Wat-aksorn (2004)

In 1997, Mr. Charoen Wat-aksorn and the Bo Nok-Hin Krud villagers began protesting against the construction of two coal power plants: Bo Nok and Hin Krud in Prachuab Kiri Khan Province (southern Thailand). The 1,400 MW coal power plants were owned by the Gulf Power Generation Company, with an investment of 50 billion THB (US$1.4 billion). Local residents feared that the coal power plants might cause environmental damage and pollution in areas most populated by farmers and fishermen. Furthermore, preparation of the EIA report was criticised for its lack of transparency.

Despite the protest, the Gulf Power Generation Company and the government insisted on continuing with the project. In 1998, this led to a violent confrontation between the 20,000 residents and the anti-mob police force. Charoen and 1000 residents later met Thaksin Shinawatra, the then PM, and called upon him to stop the project.

On the night of 21 June 2004, Charoen was shot dead by gunmen at his home village of Bo Nok, after he had met with the Senate to provide evidence on the anomalies and corrupt practices relating to the issuance of the public land rights documents. Later that year, the project was scrapped by the government. Though local politicians were accused of being involved in Chareon's murder, the Supreme Court rejected the case in 2015.

** Earth Rights International. June 24, 2004. "Thai Environmentalist, Khun Charoen Wat-aksorn, Killed". https://www.earthrights.org/news/thai-environmentalist-khun-charoen-wat-aksorn-killed*
***Prachatai. June 16, 2013. "THAILAND: Justice denied in the case of the murder of Charoen Wat-aksor". http://prachatai.org/english/node/3620*
**** Thairath. October 13, 2015. "ศาลฎีกา ยกฟ้อง คดีจ้างวานฆ่าเจริญ วัดอักษร แกนนำต้านโรงไฟฟ้าบ่อนอก" http://www.thairath.co.th/content/531972*

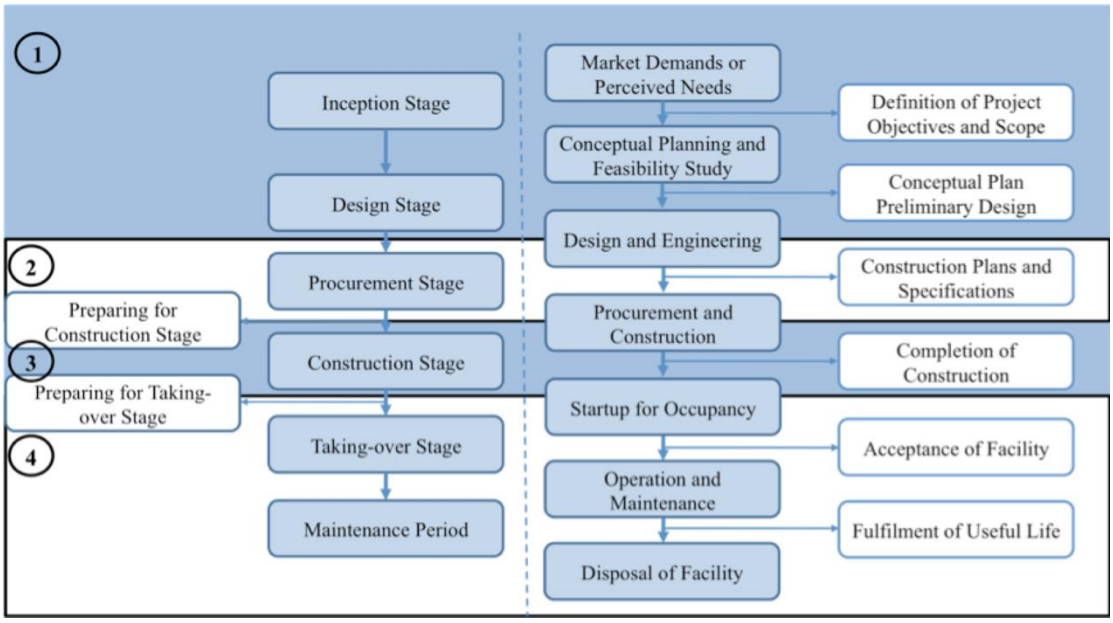
Construction Industry in Thailand and its Supply Chain

As with most countries, Thailand's construction industry is highly complex and characterised by long supply chains with multiple actors. This can create numerous opportunities for corruption, inefficiency and mismanagement.

An example of a construction project life cycle is illustrated in Figure 4.1. Depending on the project, there could be more or fewer steps in this cycle. Furthermore, these steps may not be strictly sequential. According to this life cycle, the construction process is broken down into four phases: concept, planning, and design; procurement; implementation and construction; and project evaluation, delivery, operation, and maintenance. Briefly, the concept, planning, and design phase mainly includes the creation of a master plan, architectural/engineering designs, and the subsequent Term of References (TOR). These documents are then used during the procurement phase. The implementation and construction phase is when projects are handed over to contractors, under the supervision of owners or Project Management Consultants (PMC). Finally, the last phase begins once construction is completed, and can cover a period long after the delivery of the project (Engineering Institute of Thailand (EIT), 2010; Hendrickson and Au, 1989).

Some project owners may have in-house construction supervision units that handle all phases of the work, such as Thailand's Department of Highways, and the Department of Rural Roads. However, there are many agencies that do not have such a unit. As a consequence, these agencies may seek professional advice and services from private consulting companies who are often 'PMCs' or 'engineering consultants'.

Figure 4.1: The Project Life Cycle of a Constructed Facility

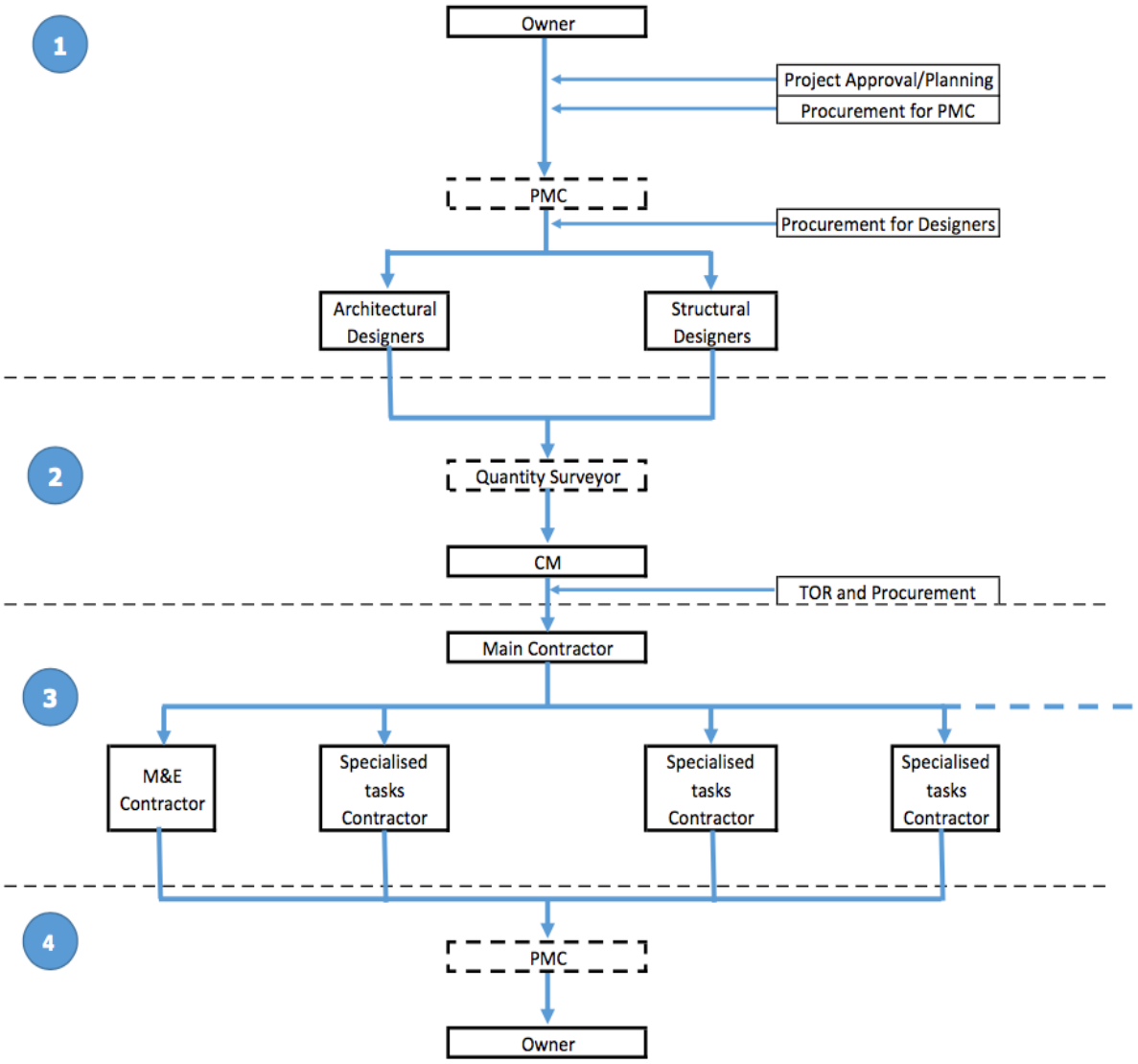


Source: Adapted from EIT (2010) and Hendrickson and Au (1989)

It is important to note that there is no universal supply chain for the construction sector in Thailand. The length of the supply chain can vary accordingly to the sector, for example subcontracting is normal in a large and complex construction but rare in road construction.

However, Figure 4.2 provides a useful example of a common supply chain. From this diagram, it is obvious that PMC and Construction Management Consultant (CM) play critical roles in a project life cycle from the beginning to completion. In fact, due to their extensive scope of work, it is argued that they are crucial determinants of the success or failure of construction projects (Hendrickson and Au, 1989).

Figure 4.2: The Supply Chain in Thailand's Construction Sector



Source: Industry Knowledge, in consultation with Executives of the Engineering Association of Thailand, 6 November 2016

Business-politics nexus

As mentioned above, construction projects involve numerous parties, and each link creates opportunities for bribery (Stansbury, 2005). Politicians have abused their power to extract bribes from both government officials proposing projects and private construction companies competing for contracts. Before the peak of business influence in politics in 1988, contractors

were usually *hua khanan*[14] (election campaigners) for politicians or political factions. In exchange for bribes, elected politicians would ensure that such contractors were awarded public construction contracts either commission free or at a reduced rate.

Seeing the benefits of political connection, many contractors have decided to enter politics directly rather than harvest gains indirectly through being *hua khanan* (Local Development Institute, 2004); to this day, many construction companies are owned or managed by politicians or their family members and thus often receive special treatment, including first preference for large construction contracts. In addition, politicians have also indirectly entered the construction business through intermediary shareholdings in construction companies. If corruption is reported, the indirect nature of their involvement allows politicians to avoid National Anti-Corruption Commission (NACC) detection (Noppanun Wanathepsakul, 2006). This integration between business and politics muddies business networks and strengthens the business-politics nexus in this sector, both locally and nationally.

At the local level, such networks have always been strong and prevalent in the construction industry. Before the amendment of the Local Administrative Act in 1997, contractors dominated provincial councils, which acted as advisory units for provincial governors in order to influence decisions on local construction projects. This dominance was so pervasive across the country that these councils were sometimes referred to as 'contractor councils'. When this system was later replaced by the new Local Administrative system in 1997 in order to decentralise power and give greater autonomy to local administrations, the pattern of relationships changed. Local contractors, now themselves run for local executive positions (Local Development Institute, 2004). Persons in political positions (including local executives and their spouses) are prohibited from owning or holding shares in private companies that engage in government contracts (Section 100, Organic Act on Counter Corruption 1999). As a result, many local executives have resorted to holding company shares through intermediaries, such as relatives or close friends (Torplus Yomnak, 2015).

Once these local construction companies accumulate sufficient capital and power, they often move to the larger arena of national politics in search of even larger benefits. Prominent examples of such companies include the Silpa-archa family[15] of Supanburi Province, the Chidchob family[16] of Burirum Province, and the Liptapanlop family[17] of Nakorn-Rajasrima Province. These family-owned construction companies rose from contractor councils to become some of the largest construction companies in Thailand, as well as the most powerful families in Thai politics. In 2006, Noppanun Wanathepsakul found that as many as 75 families involved in the parliament[18] directly or indirectly owned construction companies: 36 in Thai Rak Thai Party; 13 in the Chart Thai Party; six in the Chart Pattana Party; five in the Kwarm Wang Mai Party; three in the Seritham Party; and 13 in the Democrat Party (Noppanun Wanathepsakul, 2006).

[14] Literal translation: vote gatherer or voting chief.

[15] Banharn Silpa-archa was the head of the Chart Thai Party from 1994 to 2008. He served as Prime Minister from 1995 to 1996. He died in 2016.

[16] Nevin Chidchob was an influential politician in the Chart Thai Party before he moved to the Thai Rak Thai Party in 2004.

[17] Suwat Liptapanlop was the head of the Chart Pattana Party for many years until 2005. He is currently a mainstay of the Chart Pattana Pua Pandin Party.

[18] These families are closely connected to influential politicians through monetary and business ties; some had members in the House of Representatives and Cabinet.

Noppanun Wanathepsakul argued that these construction companies earn obvious benefits from such connections. His research revealed that under the Thai Rak Thai administration between 2001 and 2003, public construction contracts were dominated by only a few companies with close political connections. For example, the Vichitpan Construction Company[19] secured over 6 billion THB (US$170 million) worth of contracts. In a more extreme case, the Italian-Thai Development Construction Company[20] secured at least 65 billion THB (US$1.8 billion) worth of contracts, including the construction of Suvarnabhumi International Airport. Both companies had close connections with the government. These contracts significantly altered the Italian-Thai Development Construction Company's financial situation: from losses of 1.4 billion THB (US$39 million), 3.9 billion THB (US$110 million), and 2.5 billion THB (US$70 million) in 1999, 2000, and 2001 respectively, to profits of 6.3 billion THB (US$178 million) in 2002 and 0.92 billion THB (US$26 million) in 2003 (Noppanun Wanathepsakul, 2006).

Table 6 reveals public infrastructure projects' most common corrupt activities, as well as information on commission rates for each activity and a list of players in this sector which are involved. The information below also elucidates an important point: ministers, heads of government agencies, and influential politicians usually reap the largest portion of corruption rewards; 15% to inflate a project budget and 30% to secure the award of a contract.

[19] The Vichitpan Construction Company of the Chawananant family has a joint investment with the Liptapanlop family and strong business ties with the Sasomsapth family. All these families are influential in Thai politics.
[20] Taweechat Chulangkul, a major company shareholder, is a nephew of Suriya Jungrungreangkit, the Minister of Transport at the time.

Table 6: Commission Rate of Corruption in the Construction Sector in 2000

Activity	Payers	Payment to	Rate (% of project budget)
Inflating a cost estimate and project budget by 30%–50%	Project Consultants/ Contractors	Politicians/Head of the Agency	15%
Securing/increasing the chance of winning a contract	Project Consultants/ Contractors	Ministers/ Head of the Agency/ Politicians	7%–30%
Speeding up payment of construction fee	Project Consultants/ Contractors	Financial Officers (Government Officials)	20,000 THB (US$560) or 15%
Obtaining inside information on a cost estimate and bill of quantities (BOQ)	Contractors	Cost Estimators (Government Officials)	40,000 THB (US$1,120) or 0.1%
Obtaining inside information on a project design	Contractors	Designers	40,000 THB (US$1,135)/month
Extra fixed salary for government inspectors	Contractors	Inspectors (Government Officials)	5,000 THB (US$140) – 40,000 THB (US$1,120) /month
Specification rigging[21]	Contractors/ Construction Goods and Service Providers	Designers/Project Consultants	3%–5%
Withholding announcement/ confining procurement information to a small circle	Contractors	Procurement Officers	5%
Passing pre-qualification assessment	Project Consultants/ Contractors	Procurement Officers	2%
Securing the award of a contract	Contractors	Project Consultant/ Procurement Committee	5%–10%
Obtaining approval for payment of construction fee	Contractors	Project Consultants/ Inspection Committee (Government Officials)	Accommodation, Travel, Entertainment Expenses 5,000–10,000 THB (US$140–US$280) /person
Obtaining approval for using lower quality materials/approval for minor errors	Contractors	Project Consultants/ Inspection Committee (Government Officials)	20,000–40,000 THB (US$560– US$1,120) /month
Interpreting contract in favor of contractors	Contractors	Project Consultants/ Inspection Committee (Government Officials)	Positions in private companies after retirement
Obtaining approval for a deadline extension	Contractors	Project consultants/ Inspection Committee (Government Officials)	10% of construction fee

Source: (EIT, 2000)

These powerful and mutually beneficial networks pose difficult challenges for reducing corruption; furthermore, there are no incentives to report corruption. Sunthin Pasiwamart – former President of the Federation of Thai Industries, Chonburi Provincial Chapter – suggested that reporting corruption incurs too high a cost, as corruption investigations are difficult, time-consuming and can jeopardise the relationship between the reporters and the accused (Torplus Yomnak, 2015).

[21] To specify the character and/or function of the construction or construction materials in favour of a particular goods or service providers.

Key players: The 'Five Tigers'

There are a large number of construction contractors in Thailand, with at least 500 local companies registered with the Thai Contractors Association. However, the sector is characterised by a limited number of players who have been able to secure a majority of government construction contracts. Collusion is common, and is especially an issue in the transport sector. For example, a group of large contractors known as the 'Five Tigers' dominated the Department of Highways' projects for decades by taking turns to win contracts. These Tiger companies had strong political connections which helped to facilitate their monopoly of construction contracts. The political ties of each Tiger are outlined below:

- Vichitpan Construction is closely connected to the Social Action Party;
- See Sang Engineering is known to have support from Banharn Silpa-archa of the Chat Thai Party;
- Prayunewit Engineering is closely related to Suwat Liptapanlop of the Chat Pattana Party;
- Italian-Thai Development is also supported by members of the Chat Pattana Party;
- Krung Thon Engineer is connected to Somsak Thepsuthin of the Social Action Party[22].

In 1997, when there were more projects than the original Tigers could cover, the group was expanded to include approximately 10 more companies including Chor Karn Chang, Kam Pang Petch Vivat, and Civil Engineering Company; these new Tigers are also alleged to have political connections. As a result of this collusion, no matter which company won a contract, the benefits are shared across the group (Local Development Institute, 2004).

Recommendation 2

SOEs will be responsible for approximately 85% of total infrastructure investment but are widely reported to be inefficient or poorly managed; CoST should ensure that SOEs responsible for procuring public infrastructure are actively targeted and included in CoST implementation in Thailand.

Recommendation 3

Thai roads are reported to be the second deadliest in the world due to poor monitoring and minimal inspections. CoST IDS should be adapted to include additional parameters such as the number of fatalities, the number of accidents, accident location and date of last inspection, to increase understanding and enable identification of relevant remedial actions.

[22] To a lesser extent, Thai Wat Highway Engineering, an affiliate of Krung Thon Engineer, could also be considered a Tiger.

Governance in Thailand

Governance in Thailand

Overview of governance indicators

Table 7: Summary of indicators evaluating the governance situation in Thailand

Source	Results	Analysis
Worldwide Governance Index* (0 = worst; 100 = best) (2014)	26 – Voice and accountability 17 – Political instability and absence of violence/terrorism 66 – Government effectiveness 62 – Regulatory quality 51 – Rule of law 42 – Control of corruption	Poor governance level, even after the establishment of the National Anti-Corruption Commission (NACC) in 1999
Human Freedom Index** (0 = worst; 10 = best)	2012 – 6.73/10, Ranked 86 of 152 countries	Low level of freedom, below the world average
Freedom in the World*** (0 = worst; 100 = best)	2016 – 32/100	Not Free
Corruption Perception Index****** (0 = highly corrupt 100 = very clean)	2015 – 38/100, Ranked 85 of 175 countries	Low score, always below the world average
Corruption Situation Index****** (0 = worst; 100 = best)	2013 – 39/100 2014 – 49/100 2015 – 55/100	Corruption level is moderate, but improvement is considered insignificant
Global Corruption Barometer****** (1 = best; 5 = worst)	2010/11 – Government agencies (3.7), police force (3.6), political parties (3.6), and military (3.5)	Corruption level is high, seen as most pervasive in state institutions
Government Sector Transparency Index******* (0 = worst; 10 = best)	6.6/10 in 2012	Low transparency in Government Sector

Source: World Bank*, Cato Institute**, Freedom House***, Transparency International**** University of the Thai Chamber of Commerce (UTCC) (2013-2015), ***** NACC (2012)

As shown in Table 7, the lack of good governance has been a severe problem in Thailand for many years. The most direct indicator of this issue is the World Bank's Worldwide Governance Index (WGI). As can be seen in Figure 5.1, from 1996 to 2014, there was a visible decline in four of the six components; namely, voice and accountability, political stability and absence of violence/terrorism, rule of law, and control of corruption. In particular, the control of corruption has gradually deteriorated, even after the establishment of the NACC in 1999. This is due to the continuous attempts of the military regime and the business-politics nexus to create and maintain power.

On the particular issue of freedom, the Human Freedom Index (HFI)[23], is a comprehensive indicator which reflects the level of absence of coercive constraint. Its most recent report in 2012 showed that Thailand had a score of 6.73 out of 10, ranking it 86th out of 152 countries evaluated that year. This score is below the world average of 6.96 and looking at SEA countries, of all 7 countries evaluated, Thailand ranked fourth behind Indonesia, Cambodia and Brunei and just before Malaysia, Vietnam, and Myanmar. This reflection is consistent with the 2016 Freedom in the World FIW)[24] indicator which gave Thailand a score of 32 out of 100 and rated the country as 'Not Free'. The main reason FIW provided such a result was the political suppression by the current military Junta which seized power in 2014 (Freedom House, 2016).

Several other well-known governance and corruption indicators also point to Thailand's lack of good governance and pervasive corruption. The Corruption Perceptions Index (CPI) is the indicator most often referred to in academic research and the media. Most recently in 2015, Thailand scored 38 out of 100 (equivalent to 3.8)[25], the highest score it has ever received, ranking it 76 out of a total 168 countries and territories. However, 38 is still a low CPI score, as it is below the world average of 42.57. In terms of variation, as shown in Figure 5.2, Thailand's percentile has barely changed; in comparison, the countries neighbouring Thailand – such as Indonesia and the Philippines – have gradually improved their situations. Taking a wider view, as shown in Figure 5.3, Thailand has never surpassed the CPI world average, and the score distinction is even more appalling when compared with OECD countries.

In addition, CPI is often referred to as 'The Poll of Polls' (Urra, 2007, p. 4), as it accumulates, combines and boils down the results of other corruption indicators into one number for each country. Thailand's poor 2015 CPI score was derived from low scores in the following indicators:

- World Justice Project Rule of Law Index (26/100), which accesses the country's adherence to the rule of law in practice;
- Political Risk Services International Country Risk Guide (31/100), which focuses on political corruption and close ties between politics and business;
- IMD World Competitiveness Yearbook (38/100), which investigates the effects of a nation's socio-political and economic climate on corporate competitiveness;
- Economist Intelligence Unit Country Risk Ratings (38/100), which provides in-depth and timely analysis of the risks of financial exposure.

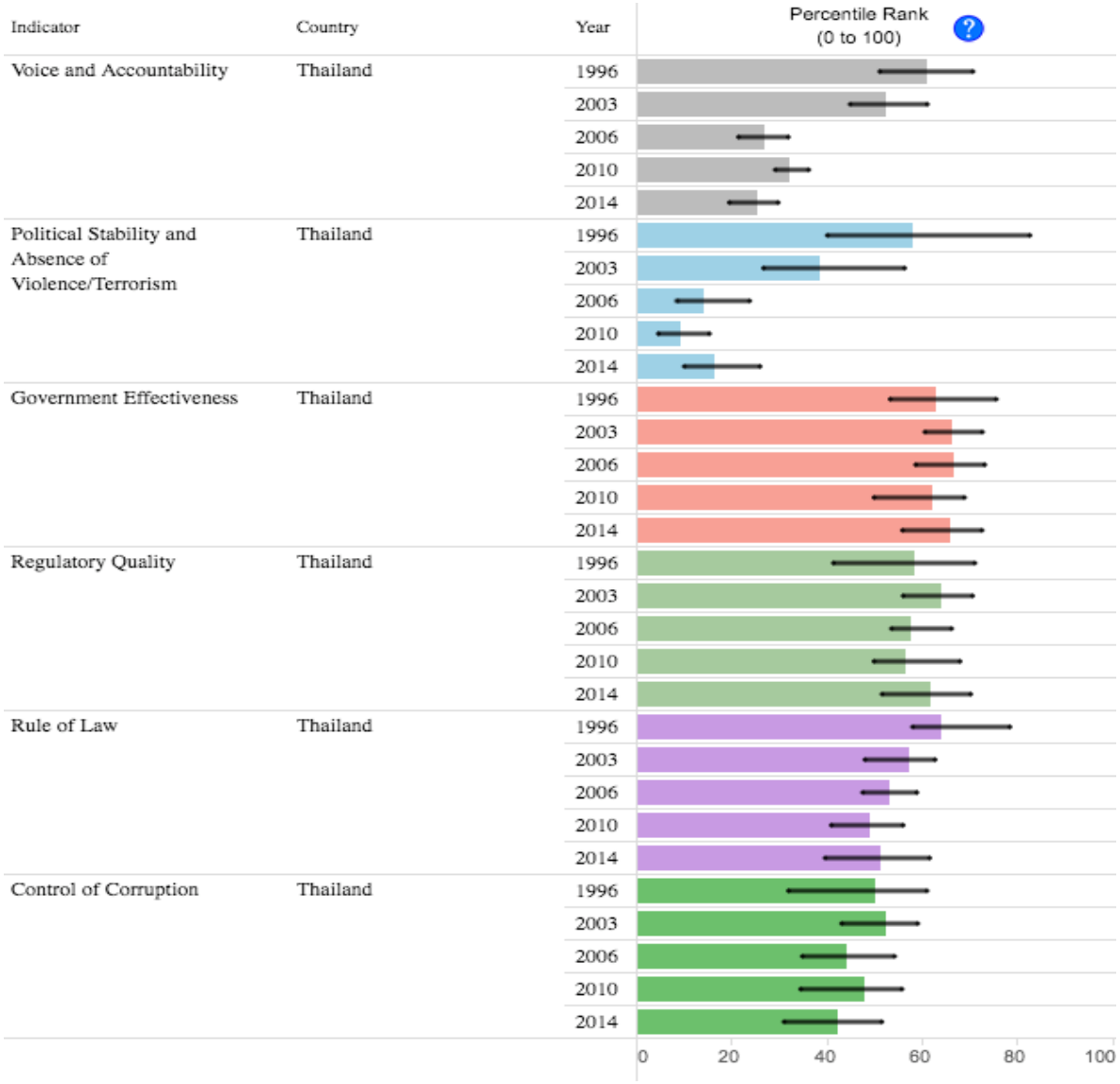
These indicators show that there is a problem with governance in Thailand across a wide spectrum from the rule of law to business competitiveness. This is a serious threat to the development of the country (Aidt, 2009, p. 4; Buchanan and Tullock, 1965; Rose-Ackerman, 1999; Shleifer and Vishny, 2002, 1993).

[23] HFI is developed by the Cato Institute, the Fraser Institute, and the Liberales Institut at the Friedrich Naumann Foundation for Freedom.

[24] FIW is developed by the Freedom House. It assesses the real-world rights and freedoms enjoyed by individuals, rather than governments or government performance per se.

[25] In 2012, TI changed the CPI calculation method, making the indicator better reflect the actual corruption situation in individual countries and enabling the CPIs from different years to be compared (time series). The new calculation method changed the scoring range from 0-10 to 0-100.

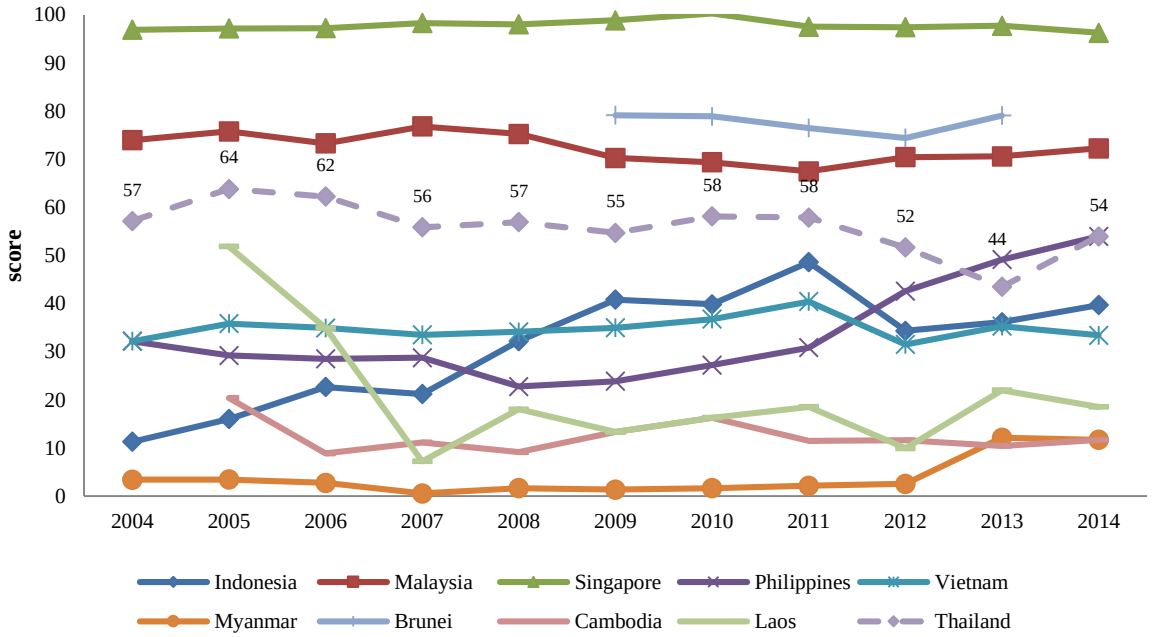
Figure 5.1: Comparison of WGI's Components from 1996 to 2014



Note: (0=worst, 100=best)

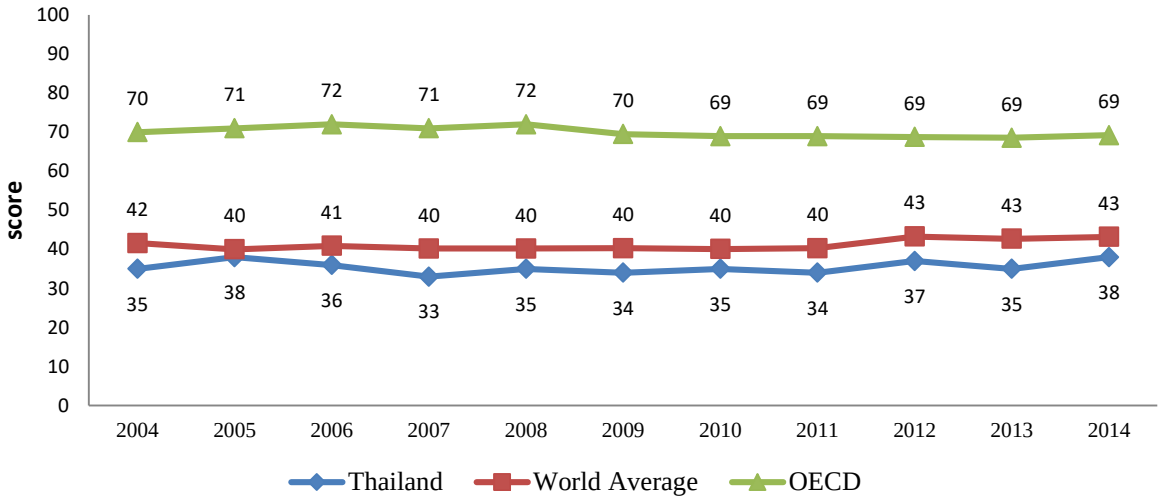
Source: (World Bank, 2014)

Figure 5.2: CPI percentile rankings of ASEAN countries between 2004 and 2014



Source: Transparency International

Figure 5.3: Comparison of CPI Scores for Thailand, OECD Countries, and the World



Source: Transparency International

In Figure 5.2, it can be seen that Thailand's CPI percentile ranking dropped significantly in 2013. This does not necessarily mean that there was any particular event or incident which severely impacted corruption perceptions in Thailand. As shown in Figure 5.3 in fact, Thailand's 2013 CPI raw score reduced only slightly; the lower ranking could be explained in part by the success other countries had over the same period in countering corruption.

Oversight

Although, efforts have been made to address corruption in Thailand, much more needs to be done. The NACC is the main organisation responsible for investigating and preventing corruption. The organisation is prescribed by the constitution; and has been equipped with various tools to bolster its ability to monitor and investigate all public officials and agencies, including state enterprises. The NACC's power has been further enhanced by the Organic Act on Counter Corruption 1999 (Torplus Yomnak, 2015).

However, the NACC has yet to live up to its full potential. After widespread criticism of its failure to prevent corruption in a number of cases, including the Klong-Darn Wastewater Management Project, the NACC redirected their efforts towards a more 'proactive' or 'preventative' approach. However, this has yet to deliver satisfying results. The NACC remains optimistic about its new corruption prevention measures, arguing that such measures need time to mature. However, unless the socio-political environment detailed in the previous Chapter, is taken into account, the NACC will be ineffective in its actions.

Case Study 3: Klong-Dan Project (1995)

Klong-Dan Project was officially initiated in 1995, when an international infrastructure engineering company, hired by the Asian Development Bank (ADB) suggested that two wastewater treatment plants were needed on the Chao Phraya River estuary. However, when the project was launched, the two plants were merged into one and relocated 20 km away. This increased the project budget by 80%, from 12.7 billion THB (US$360 million) to 22.95 billion THB (US$650 million) also jeopardised the purpose of the project. By the end of the project, 20 billion THB (US$567 million) was spent on the plant, much of which was allegedly looted, and due to the inappropriateness of the new location, the plant is not operational (Torplus Yomnak, 2015). Although many culprits were convicted, Wattana Asawahame, the Deputy Minister of Interior who was the main responsible person, fled the country before conviction. Due to the lack of transparency, the NACC could only target the land purchase scandal and other contract irregularities and the massive corruption in the construction project remained untouched (The Nation, 2003).

In addition to the NACC, there are three oversight agencies who also have a role to play, not only in fighting corruption but in monitoring and supervising performance of public institutions. These are:

- Office of Auditor General (OAG), an independent organisation that audits the public budget;
- Ombudsman of Thailand, which investigates general complaints against public officials;
- Public Sector Anti-Corruption Commission (PACC), which investigates the corrupt practices of low and mid-level government officials;

However, these anti-corruption agencies, including the NACC, must rethink their strategies. The oversight agencies are investigative in nature. However, relying solely or primarily on investigative functions without adequate enforcement will not deliver effective results.

Furthermore, these agencies, especially the NACC and the OAG, have been criticised for their lack of transparency. They have consistently failed to disclose their Annual Reports in a timely manner (Deunden Nikomborirak et al, 2015). The most recent Annual Report was published in 2014. This is due in part to constitutional limitations; according to the 2007 Constitution, the

NACC and OAG Annual Reports must be approved by Parliament before disclosure to the public. However, the timeframe for Parliamentary scrutiny and approval is not stipulated.

The NACC has also rejected requests for information from news agencies; for example, the NACC rejected Isranews[26] request for information on the investigation into the National Broadcasting and Telecommunications Commission (NBTC) alleged collusion with mobile operators on the auction of 3G mobile licences (Bangkok Post 2014, Isranews 2015). In 2016, NACC also rejected ThaiPublica's[27] request for the disclosure of the base price of the Rajabhakti Park Construction Project, which is of great public interest due to the alleged misuse of public funds involving several high-ranking members of the military government (Southeast Asian Press Alliance, 2016).

In addition to improving enforcement, strategic measures for early detection or prevention of corruption or other 'bad behaviour' should be implemented. This situation opens up an opportunity for initiatives such as CoST; greater transparency can help uncover corruption, inefficiency or mismanagement and heighten pressures on government to improve.

Governance and public participation in public infrastructure

Freedom of Speech, Association and Assembly (Freedom House, 2016)

Since taking power in 2014, freedom of speech in Thailand has deteriorated significantly due to the government's systematic use of censorship, intimidation, and legal action. Surveillance of citizens and media outlets who are critical of the government or deemed insulting to the monarchy, is commonplace. This has often led to interrogation or intimidation sessions known as "attitude adjustments" (Freedom House, 2016).

In addition, politicians and companies often use defamation as a tool to silence opponents, critics, and activists (Ibid.). Defamation is a criminal offense and carries sentences of up to two years' imprisonment or a fine of up to 200,000 THB (US$5,600), or both (Section 328, Thai Criminal Code).

Case Study 4: Contamination of water supply (2015)

In December 2015, Tungkum Ltd, a mining company filed criminal defamation charges against a 15-year-old student over remarks made in an interview with the Thai Public Broadcasting Service (Thai PBS). During this interview, the schoolgirl claimed that the firm's activities were contaminating the water supply in her village. Although the government's 2014 official communication to the United Nations Office of the High Commissioner for Human Rights confirmed that the water in the said mining area was "contaminated with cyanide, cadmium, and manganese", the government maintained that the reasons for the contamination were unclear. The mining company also sued Thai PBS, seeking 50 million baht (US$1.4 million) in damages and a five-year suspension of its broadcasting license (Fortify Rights, 2015).

As a result of these restrictions, online censorship and self-censorship are common. Many media outlets, including previously outspoken newspapers have been comparatively subdued since the coup. For example, Thai publishers of the New York Times refused to publish a front-page story in September 2015 because it involved discussions relating to King's health (The

[26] Isranews is a leading Thai online investigative news agency.

[27] ThaiPublica is an online investigative news outlet

Guardian, 2015). The issue was considered too sensitive for publication. At the end of 2015, the New York Times announced its decision to stop publishing its international editions in Thailand (Benar News, 2015).

These controls on freedoms of speech and expression are not limited to citizens or the media. Academic freedom is also restricted; government permission is required to hold university discussions and seminars on topics regarded as politically sensitive. Additionally, these events are subject to monitoring and could be cancelled by the authorities. Furthermore, academics have been placed under surveillance and may be summoned for questioning, or receive home visits by security officials. Universities have also been pressured to adjust their curriculums to favour more patriotic themes and discourage anti-coup activism (Freedom House, 2016).

Although Thailand has an active civil society, groups working on human rights or freedom of expression issues, face restrictions. The National Council for Peace and Order (NCPO) often claim that these activities violate national laws relating to political gatherings, or create "public disturbances." In June 2015, the Thai Lawyers for Human Rights panel session aimed at discussing human rights in Thailand since the coup, was cancelled at the last minute (Amnesty International, June 2015). It was claimed the event was "likely to cause disturbance" (Ibid). In another 2015 example, security officials actively monitored seminars on various issues including Lesbian, Gay, Bisexual, and Transgender (LGBT) rights, and environmental issues. Cautions are sometimes issued to event organisers ahead of such events, reminding them not to oppose NCPO policies (Freedom House, 2016). In spite of these restrictions, it is extremely important for civil society to continue working with local citizens, including vulnerable groups, to champion their rights. Historically, farmers, hill tribe indigenous people and fishermen have had their livelihoods threatened by government infrastructure projects which were serving the growing wave of industrialisation. Without civil society's support, their voices would not have been heard. Below are two examples of civil society activism in Thailand:

Case Study 5: Nam Choan Dam (1982)

In 1982, campaigners rallied against the government's plan to build the Nam Choan Dam in the Thung Yai Naresuan Wildlife Sanctuary, part of the largest forest in SEA. The campaign was a vigorous, collaborative effort between villagers, environmentalists, and rural Non-Governmental Oragnisations (NGOs). The villagers had concerns about the dam including: possible displacement of local peoples; the destruction of the forest (an essential element of their economy); and, environmental impacts including a change in local climate and decreased rainfall. Environmentalists were critical of the dam's potential impact on forest wildlife. Furthermore, rural NGOs – such as New Tang Chumchon and the Project for Ecology Recovery – opposed the transferring of resources from rural to urban communities. The media also played an important role in gaining public attention for the movement. Several well-known campaign journalists consistently brought attention to the case to ensure maintained public interest and popular singers wrote songs in support of the fight. This large scale, diverse movement successfully pressured the government into canceling the Nam Choan Project in March 1988 (Pasuk Phongpaichit and Baker, 2002).

Case Study 6: Expansion of Highway 219 (2001)

In 2001, the villagers of Sa-Tuek District in Buriram Province, north-eastern Thailand, protested against a state project to expand Highway 219. This project included the reconstruction of the Sa-Tuek Bridge over the River Mun. The villagers had not been consulted or even informed about the project prior to the contractors' arrival. They subsequently discovered that the Department of Highways planned to replace the existing bridge with a new bridge that was six meters higher, resulting in the highway cutting through the district's center and bisecting the community. This plan would also have obstructed the transportation of agricultural products, as the bridge would have been too high and unsuitable for the mini-tractors used by villagers. The villagers joined forces with NGOs and environmentalists; in addition to the above mentioned impacts, they also argued that the project would result in significant air pollution in the surrounding areas. It was emphasised that objections were not to the project as a whole, but instead that specific elements of its design would have negative social and environmental impacts (Piriyarangsan et al., 2004). Despite various attempts to voice concerns to the government, the villagers were only able to delay construction for two years.

Despite this activism, modern day civil society still faces a number of challenges including a lack of experience and resources to effectively monitor and scrutinise public projects. They remain too small in size and number which limits their ability to effectively challenge entrenched social norms. Therefore, it is crucial that collaboration amongst these anti-corruption actors is strengthened in order to enhance impact. In this regard, there is an opportunity for international initiatives, such as CoST, to provide capacity building training and other tools to strengthen civil society.

Freedom of Press

Broadcast media in Thailand has traditionally been dominated by state entities; the country's free-to-air television stations and the roughly 700 officially registered radio stations were traditionally controlled by state entities such as the armed forces and police. The media landscape was reshaped in 2013, when commercial digital terrestrial television licenses were introduced and ended the oligopoly of the country's six analogue channels. However, the digital transition process still favoured major players with the resources and market share to run a successful broadcast station in a newly competitive sector. The dominance of state-controlled media has also been undermined in recent years by cable, satellite, and internet-based television, and the growth of community radio. Thailand has six analogue terrestrial television channels, 24 commercial digital terrestrial channels, and 661 cable, satellite, and online television services. There are also 3,000-plus community radio stations and more than a dozen national newspapers. In addition, digital television spectrum space has been set aside for 12 national public-service channels and 12 regional community channels.

Despite these encouraging developments, press freedom in Thailand has deteriorated significantly; Freedom House rated Press Freedom in Thailand as 'Not Free' in 2015. The military Junta, established as the NCPO regime has actively clamped down on press freedoms, including enforcing strict defamation and lèse-majesté laws, banning criticism of its rule, and shutting down media outlets.

Since the coup, the government has shut down or blocked thousands of websites it has deemed offensive or inappropriate (Reuters, 2016). In 2015, two media outlets – Peace TV and TV 24 – were shut down for allegedly airing programmes critical of the military government and threatening national security (Freedom House, 2016). Some of these media outlets, including Peace TV, have since resorted to online-only distribution (Ibid.).

However, new measures to further restrict media freedoms were introduced in December 2016, when a bill amending the 2007 Computer Crimes Act was unanimously approved by parliament (The Diplomat, 2016). This amendment will heighten surveillance, facilitate data interception and greater censorship including the blocking of websites. In spite of this, Thai government websites have been actively targeted by hackers in acts of protests. As a result, nine hackers were arrested (Security Week, Dec 2016).

Case Study 7: Pravit Rojanaphruk and social media

In September 2015, journalist Pravit Rojanaphruk was detained in connection with Tweets and Facebook comments that questioned the legitimacy of the Junta (Prachatai English, 2015). During his detention, he was isolated in solitary confinement. Pravit was released after three days upon signing a declaration vowing not to work for any anti-coup movement. He resigned the day after his release, following 23 years at the Nation, reportedly under pressure from the paper (Bangkok Post, 2015). This was not the first time Pravit had been detained; he had previously been summoned for "attitude adjustment" and held for seven days immediately after the coup in 2014 (Freedom House, 2016).

Veteran journalist Pravit says military ill-treated him during detention". Pratchatai English. 2015-09-17. Retrieved 19 September 2015.
"Nation journalist Pravit quits after detention". Bangkok Post. 2015-09-17. Retrieved 17 September 2015.

In terms of print media, the majority of print outlets in Thailand are privately owned, either by large conglomerates and prominent families, often with political ties. Although these are, for the most part, privately owned and in theory, subject to fewer restrictions than broadcast media, the publications often take a clearly partisan political position.

Recommendation 4

Civic space in Thailand is limited; CoST must engage the government to lobby and advocate for greater opportunities for citizen participation. One ready-made opportunity is the CoST multi-stakeholder approach which provides safe space for dialogue between government, industry and citizens.

Recommendation 5

Civil societies in Thailand are relatively small in size and number, and lack resources, expertise and experience to effectively engage with the government. CoST should include dedicated activities to build civil society capacity to strengthen demand for information and enable monitoring of projects.

Recommendation 6

Given the limited press freedoms in Thailand, coupled with the prevalence of state-controlled media agencies, CoST implementation must include a programme for building the capacity of the local press and media. This should centre on the importance of integrity and objectivity in reporting and investigative journalism. Media officials must be made the understand their duties and responsibilities in disseminating information to citizens. CoST should also work with the media to advocate for greater freedom of press.

Recommendation 7

In Thailand, enforcement of regulations is often weak. CoST should partner with the existing oversight agencies such as the NACC, OAG, PACC and others, to share data, highlight discrepancies and support their efforts to monitor public infrastructure projects.

Public infrastructure transparency policy and practice

Public infrastructure transparency policy and practice

Existing Framework for Transparency

In the Open Budget Survey 2015 (International Budget Partnership, 2016), Thailand was one of the worst among the ASEAN5[28], achieving a score of just 42/100 on transparency (see Appendix 1). In further analysis, though Thailand receives an 'Adequate' score of 75/100 for oversight by state auditors, it has weak budget oversight by legislature (30/100) and limited public participation (42/100).

Thailand has made efforts to work with international partners to strengthen its transparency framework, including its membership to CoST and ratification of the United Nations Convention against Corruption (UNCAC).

In 2015, the military government via the National Anti-Corruption Committee, confirmed the relevance and applicability of leading international initiatives focused on transparency and good governance, namely CoST, the Open Government Partnership (OGP), and the Extractives Industry Transparency Initiative (EITI). However, of these initiatives, Thailand is only currently an official member of CoST.

Transparency in Theory

Today in Thailand, there are eight laws which regulate public sector transparency and disclosure of information. These are:

1. Official Information Act 1997 (OIA 1997)
2. NACC Act 1999
3. Land Expropriation Act 1987
4. Cabinet Resolution of 20 April 2011 on Obligation of Government Agencies to disclose information on their website according to the Section 9 (3) and 9 (8) of the OIA 1997.
5. Regulations of the Office of the PM on Procurement 1992 (ROPMP 1992)
6. Regulations of the Office of the PM on Public Consultation 2005
7. Regulations of the Office of the PM on Electronics Procurement 2006 ROPMeP 2006)
8. The Official Letter of the Ministry of Finance of 22 August 2012 on Guidelines on Disclosure of Government Reference Costs of Construction Works.

Table 8.1 shows that most of these transparency laws are under the authority of the PM's Office. Among the transparency laws, the OIA 1997 is the main Access to Information law in Thailand. It requires the disclosure of information across the project lifecycle but excludes long-term maintenance and operation. The law is applied to all public agencies, including SOEs and local administrations. In addition to the OIA 1997, there is also the ROPMP 1992 and the ROPMeP 2006 which are the main procurement laws requiring PEs to disclose information on projects.

[28] Please note, Singapore is not included in the Open Budget Survey assessment.

Table 8.1: Thai laws and regulations on transparency in public infrastructure projects

Laws and regulations	Enforcer	Project phases covered by the law/regulation.		
		Project preparation	Procurement	Construction phase
1. The National Anti-Corruption Commission Act of 1999 (NACC Act 1999)	NACC		✓	
2. Official Information Act 1997 (OIA 1997)	Office of Information Commission (OIC), PM Office	✓	✓	✓
3. Land Expropriation Act 1987	PE	✓		
4. Cabinet Resolution of 20 April 2011 on Obligation of Government Agencies to disclose information according to the Section 9 (3) and 9 (8) of the OIA 1997 on their website.	Office of Information Commission (OIC), PM Office	✓	✓	
5. Regulations of the Office of the PM on Procurement 1992 (ROPMP 1992)	CGD, Ministry of Finance		✓	
6. Regulation of the Office of the PM on Public Consultation 2005	Office of the Permanent Secretary, PM Office	✓		
7. Regulations of the Office of the PM on Electronics Procurement 2006 (ROPMeP 2006)[29]	CGD, Ministry of Finance		✓	
8. The Official Letter of the Ministry of Finance of 22 August 2012 on Guideline on Disclosure of Government Reference Costs of Construction Works.	Ministry of Finance		✓	

Thai law mandates a minimum level of transparency for public infrastructure projects. The OIA 1997 and its subordinate regulation (OIC's Announcement of 16 January 2015) requires PEs to disclose a summary list of monthly procurement activities into the public domain; this applies to contract awards, both competitive bids and concession agreements. According to the Cabinet Resolution of 20 April 2011, this must be published on their respective websites. Section 8 (3) of the ROPMeP 2006, which applies to procurement projects worth more than 2 million THB (US$56,000), mandates the disclosure of project ToRs on PE websites and the centralised procurement portal (www.gprocurement.go.th) for at least three consecutive days to allow for public comment. However, contracts are not explicitly required to be publicly disclosed. In practice, public agencies and contractors are very concerned about sharing trade secrets or sensitive information so this type of document is unlikely to be made available.

According to the Electronic Government Agency (EGA), procurement projects of SOEs and the local administrations accounted for 9.2% and 11.6% respectively of the total value of the Thai government's procurement in 2016 (688.2 billion THB (US$19.5 billion))[30]. However due

[29] ROPMeP 2006 only applies to projects worth more than 2 million THB (US$56,000).

[30] See EGA's government spending-tracker website, Thailand Government Spending: https://govspending.data.go.th.

to the highly decentralised nature of public procurement in Thailand. The ROPMP 1992 and the ROPMeP 2006 do not apply to the 56 SOEs or local administrations, which are governed by a different set of regulations. The rationale for this is:

- SOEs are subject to stringent internal oversight by their respective Boards of Directors, whilst central public agencies are overseen by the Central Procurement Committee that only intervenes when PEs have problems interpreting procurement law and/or receive project-related complaints; and,
- SOEs have the authority to manage higher budgets, in comparison to ministry departments. For example, the Managing Director of AOT can approve a procurement project of 75 million THB (US$2.1 million) whilst a Director-General of a ministry department only has the authority to approve projects valued at 50 million THB (US$2 million).

In principle, these flexibilities enable SOEs to compete with private companies, especially those in industries such as banking (Krung Thai Bank) and aviation (Thai Airways). However, this may be a pretext to avoid checks and balances. Nonetheless, large SOEs that are listed on the stock market, such as PTT (oil and gas), Krung Thai, Thai Airways, AOT and Mass Communication Organization of Thailand (MCOT), must comply with the Stock Exchange Commission (SEC) rules which require publication of annual and financial reports.

As for the Local administrations, these are overseen by the Ministry of Interior, specifically the Department of Local Administration. This is the result of decentralisation priorities rather than any avoidance of transparency. Furthermore, the structure and provisions of the procurement law of local administrations do not differ from those of the ROPMP 1992.

Land expropriation deserves special mention as an important issue that requires greater transparency. For many new public infrastructure projects, land expropriation may be unavoidable. The 1987 Land Expropriation Act (Section 7 and 28) stipulates that a PE must issue an announcement, in advance, to inform the local population about the proposed project in their area and their rights to compensation[31]. The land expropriation plan must be published at city hall, the offices of the project owner and the land office. They must also issue a *royal decree* (a subordinate law to an act) in order to expropriate lands, which must be published in the Royal Government Gazette (*Ratchakitchanubeksa*). The law does not specify any requirements for online disclosure. OIC's Announcement of 27 January 2016 provides the transparency standard and key performance indicators for compliance with Section 9 (8) of the OIA 1997. According to Section 1 (7) and 1 (8), PEs must publicly disclose an on their websites internal audit reports and other relevant reports such as OAG reports. However, these requirements often do not go far enough. Furthermore, there have been instances, as seen in the previously mentioned Songkhla Deep-Sea Port project, where projects have gone ahead despite the existence of significant resettlement or social impacts on the local

This analysis of EGA is based on CGD data. It covers procurement projects within the 2015 fiscal year (October 1, 2015 to September 30, 2016). The SOEs mentioned here include only those which are not listed on the stock market. As such, five SOEs – PTT (oil and gas), Krung Thai Bank, Thai Airways, AOT and MCOT – are excluded as they are listed on the stock market and do not report directly to the CGD.

[31] The owner of the expropriated properties or lands will be informed to come to receive the compensation. Should the owner of the expropriated properties or lands consider the compensation to be inadequate, they can file an appeal with the Minister in charge of issuing the land expropriation decree for a reassessment of the compensation. If the land owner is still dissatisfied following the Minister's ruling, they can file a complaint to the Administrative Court (Bangkok Post, 2012). According to the Statistics Department of the Administrative Court, 11,815 complaints on the land expropriation were filed to the Administrative Court from 2007 to 2016, or 1,182 complaints per annum accounting for 18% of the total number of complaints filed to the Administrative Court.

community. Table 8.2 below shows a comparison between Thai legal disclosure requirements and CoST IDS.

Table 8.2: Thai legal disclosure requirements in comparison to CoST IDS

Project Phase	#	Information to be disclosed	Required by law/policy		
			Proactive	Upon Request	Channel
Date	1	Last updated	Not required	Not required	-
Project Identification	2	Reference number	Not required	Not required	-
	3	Project owner	OIA 1997 / Regulation of the PM Office on Public Consultation 2005	-	project owner's website/ PM Office's website for public consultations*
	4	Sector, Subsector	Not required	Not required	-
	5	Project name	OIA 1997 / Regulation of the PM Office on Public Consultation 2005	-	project owner's website/ PM Office's website for public consultations*
	6	Project Location	Not required	Not required	-
	7	Purpose	OIA 1997	-	project owner's website
	8	Project description	OIA 1997	-	project owner's website
Project Preparation	9	Project Scope (main output)	ROPMeP 2006 / OIC's Announcement of 27 January 2016	-	project owner's website
	10	Environmental impact	ROPMeP 2006 / OIC's Announcement of 27 January 2016	-	project owner's website
	11	Land and settlement impact	Land Expropriation Act 1987	-	PE's site, city hall, land office/ the website of the Royal Gazette**
	12	Contact details	Not required	Not required	-
	13	Funding sources	OIA 1997 / Regulation of the PM Office on Public Consultation 2005	-	project owner's website/ PM Office's website for public consultations*
	14	Project Budget	OIA 1997 / Regulation of the PM Office on Public Consultation 2005	-	project owner's website/ PM Office's website for public consultations*
	15	Project budget approval date	Not required	Not required	-
Project Completion	16	Project status (current)	Not required	Not required	-
	17	Completion cost (projected)	OIC's Announcement of 27 January 2016	-	project owner's website
	18	Completion date (projected)	OIC's Announcement of 27 January 2016	-	project owner's website
	19	Project Scope at completion (projected)	OIC's Announcement of 27 January 2016	-	project owner's website
	20	Reasons for project changes	OIC's Announcement of 27 January 2016	-	project owner's website
	21	Reference to audit and evaluation reports	OIC's Announcement of 27 January 2016	-	project owner's website
Contract Phase	**#**	**Information to be disclosed**	**Required by law/policy**		
			Proactive	**Upon Request**	**Channel**
Date	22	Last updated	Not required	Not required	-
Procurement	23	PE	OIC's Announcement of 16 January 2016	-	project owner's website/www.gprocurement.go.th
	24	PE contact details	OIC's Announcement of 16 January 2016	-	project owner's website/www.gprocurement.go.th
	25	Procurement process	OIC's Announcement of 16 January 2016	-	project owner's website/www.gprocurement.go.th
	26	Contract type	Not required	Not required	-
	27	Contract status (current)	Not required	Not required	-
	28	Number of firms tendering	OIC's Announcement of 16 January 2016	-	project owner's website/www.gprocurement.go.th
	29	Cost estimate	NACC Act 1999 (Section 103/7) / NACC Guideline on reference price disclosure / Official Letter of the Ministry of Finance of 22 August 2012	-	project owner's website/www.gprocurement.go.th
	30	Contract administrative entity	Not required	Not required	-
	31	Contract title	OIC's Announcement of 16 January 2016	-	project owner's website
	32	Contract firm(s)	OIC's Announcement of 16 January 2016	-	project owner's website
	33	Contract price	OIC's Announcement of 16 January 2016	-	project owner's website
	34	Contract scope of work	NACC Act 1999 (Section 103/7) / NACC Guideline on reference price disclosure / Official Letter of the Ministry of Finance of 22 August 2012	Not required	project owner's website/ www.gprocurement.go.th
	35	Contract start date and contract period (duration)	Not required	Not required	-
Implementation	36	Variation to contract price	Not required	Not required	-
	37	Escalation of contract price	Not required	Not required	-
	38	Variation to contract duration	Not required	Not required	-
	39	Variation to contract scope	Not required	Not required	-
	40	Reasons for price changes	Not required	Not required	-
	41	Reasons for scope and duration changes	Not required	Not required	-
Total # of data points required by law			**23**	**0**	
Percentage of data points required by law			**58%**	**0%**	

*The PM Office's website for public consultations is www.publicconsultation.opm.go.th
** The website of the Royal Gazette is http://www.mratchakitcha.soc.go.th

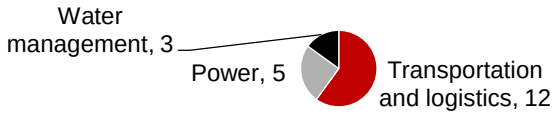
In comparison to the CoST IDS, current Thai laws only require PEs to disclose 23 of the 40 CoST IDS data points; this is equivalent to 58% of the CoST IDS. The channels for disclosure include PE websites, the PM Office's website and city hall amongst others. The remaining 17 CoST IDS data points are not required to be disclosed by law. Given that CoST requirements are more stringent than Thailand's current infrastructure transparency regulations, there is a strong case that CoST can augment existing national transparency efforts. The OIA 1997 will be a starting point for CoST, as it already mandates the disclosure of almost 50% of the CoST IDS and is also applicable to SOEs.

Transparency in Practice

Although there is an existing framework for transparency, compliance with existing laws and regulations is an issue. In 2013, TDRI conducted a survey of 59 SOEs to assess online disclosure compliance at the procurement stage[32] (see Appendix 2 for methodology). The survey shows that 8% of SOEs (totalling 4 SOEs) disclosed no procurement information on their website. According to the survey, 25% of SOEs disclosed invitation to bid announcements, ToRs, and reference price; however, no procurement summary lists were available on their websites. In cases where PEs failed to disclose information in compliance with the law, a complaint can be filed with the OIC Office. Nonetheless, the Office has no authority to impose a sanction against the public agencies or their officers; it can only send its recommendation and remarks to the head of the agency involved.

In this final section of the study, twenty sample public infrastructure projects have been assessed to measure their compliance with both national requirements and the CoST IDS. All projects within the sample are SOE projects as SOEs, especially the SRT (railways) and the MRT (urban railways), are, or will be, the main owners of large public infrastructure projects in the next 10 years. The projects were drawn from 13 SOEs spanning three public infrastructure sectors: transportation and logistics (12 projects), power (five projects) and water management (three projects) (see Figure 6.1). The 20 projects are comprised of 12 recently completed[33] and eight ongoing public infrastructure projects[34], each with an investment budget of five million THB (US$140,000) or more. A full breakdown of the projects in the sample assessment is provided in Appendix 2.

Figure 6.1: Sectors of infrastructure and numbers of projects surveyed in sample



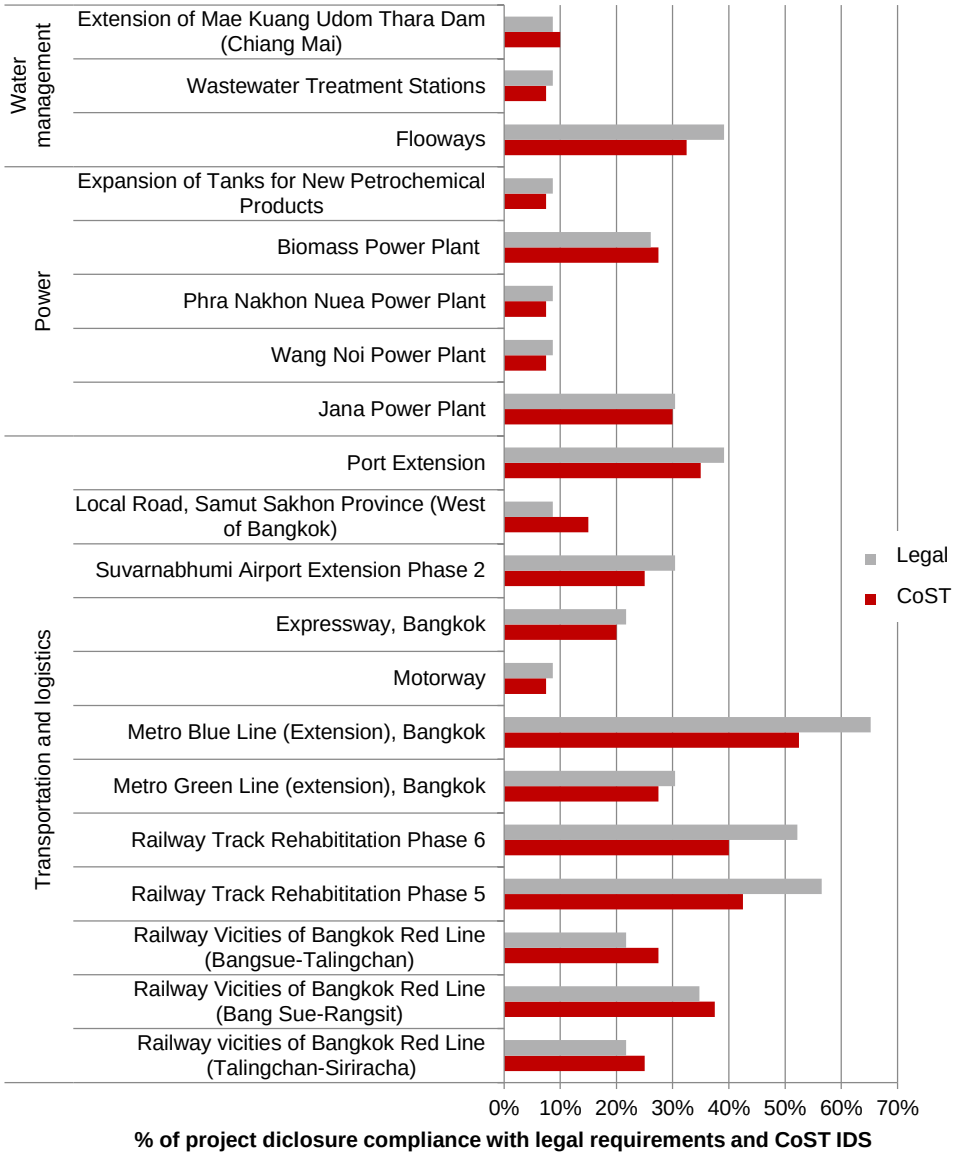
Unit: projects

[32] This 2013 survey included 57 SOEs under SEPO's oversight and two other SOEs i.e. PTT Exploration and Production Public Company Limited, a holding company of the PTT, and *Suksapan,* stationery and educational instrument provider of the Ministry of Education. In 2016, two SOEs were merged to establish the Rubber Authority of Thailand, bringing the number of SOEs down to 56.

[33] This refers to projects completed less than two years ago; please see Appendix 3 for project status information.

[34] Eight ongoing projects have been included in the sample due to their strategic importance in Thai infrastructure or relevance to CoST Thailand's implementation. Although their ongoing status could be deemed to affect compliance rates, only six CoST IDS data points are inapplicable prior to completion; furthermore, these data points are not required for disclosure under Thai law. In theory, once the ongoing projects are completed, their compliance rates could increase. However, CoST's previous experience, in country and through research, shows that compliance tends to be highest in the early project stages and lowest at the later stages. This is also evidence by the 12 ongoing projects in this sample assessment, who have disclosed no information on these six data points.

Figure 6.2: Percentage compliance of projects with legal requirements and CoST IDS

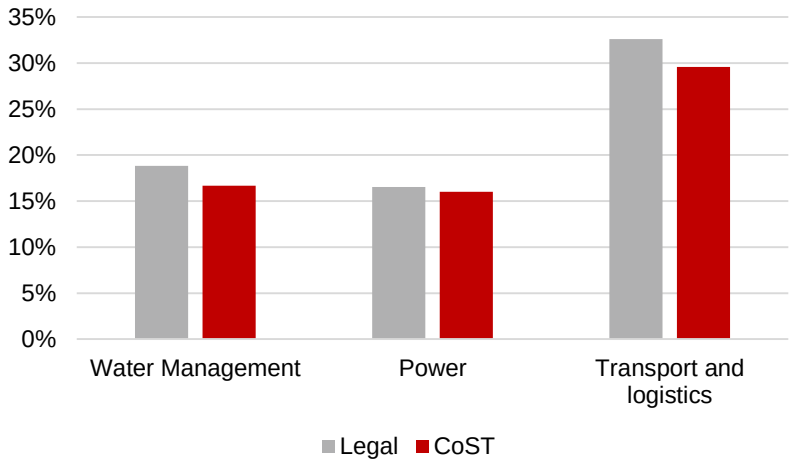


From Figure 6.2, it can be seen that the average compliance rate with legal requirements across all twenty projects was 27% and compliance with the CoST IDS was 24% on average. The projects with the greatest level of compliance with legal requirements are the Railway Track Rehabilitation Phase 5 and Phase 6; with compliance rates of 57% and 52% respectively, they are both almost two times more compliant with legal requirements than the average project. With regards to the CoST IDS, the compliance rate is slightly lower at 43% and 40% respectively; however, both projects still exceed the average project CoST IDS compliance rate.

There are five projects that have remarkably low levels of transparency compliance; the Motorway, Wang Noi Power Plant, Phra Nakhon Nuea Power Plant, Expansion of Tanks for New Petrochemical Products, Wastewater Treatment Stations projects all attained only 9% compliance with legal requirements and 8% with the CoST IDS. Three of these projects are from the power sector, with Wang Noi Power Plant and Phra Nakhon Nuea Power Plant under the Electricity Generating Authority of Thailand SOE. The remaining two poorly performing projects are from the transport and water sectors.

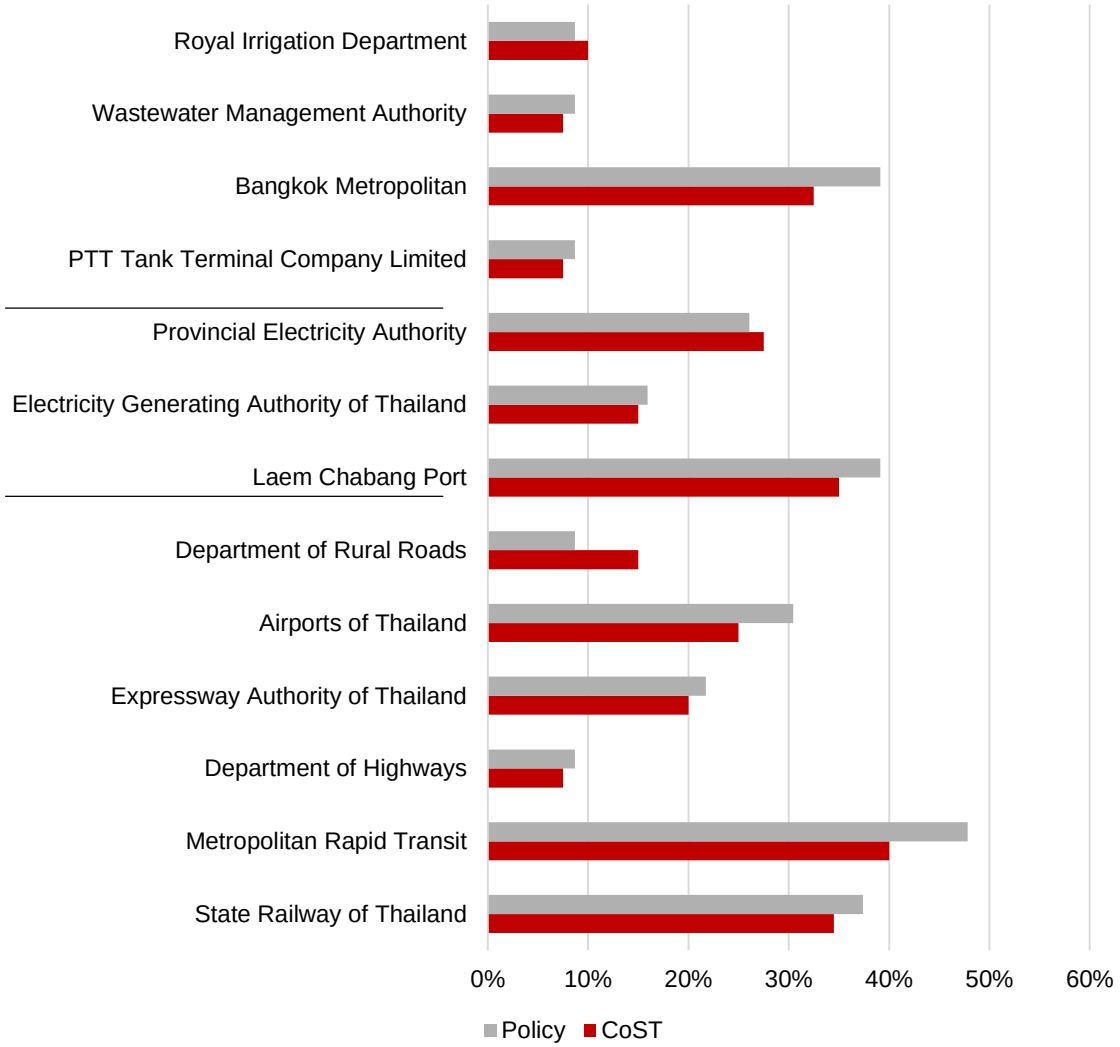
Looking at the three sectors included in the analysis, Figure 6.3 shows the average level of compliance across water, power and transport and logistics with both legal and CoST IDS requirements. At sector level, transparency is weak with the greatest compliance for the transport and logistics sector still only reaching compliance levels of 33% and 30% with legal requirements and the CoST IDS respectively. There is least transparency in the power sector; nonetheless, the distinction is minimal and levels of compliance are only just below those of the water sector.

Figure 6.3: Average percentage compliance across sectors with legal requirements and CoST IDS



Moving from sector to SOE performance, Figure 6.4 explores the average compliance across the 13 SOEs sampled, with both legal and CoST IDS requirements. The most compliant SOE was Metropolitan Rapid Transit, with an average 48% compliance rate with legal requirements and 40% with the CoST IDS. In comparison, Wastewater Management Authority, PTT Tank Terminal Company Limited and Department of Highways were the least compliant SOEs; these SOEs returned an average compliance rate of just 9% compliance with legal requirements and 8% with the CoST IDS. As previously discussed, average project compliance in the water sector with legal requirements and the CoST IDS is very low at a rate of 19% and 17% respectively. Average project compliance rates in the transport and logistics sector is relatively high and it should be noted that the SOE Bangkok Metropolitan exceeds the transport sector average with compliance rates of 39% and 33% respectively.

Figure 6.4: Average percentage compliance across SOEs with CoST IDS and legal requirements

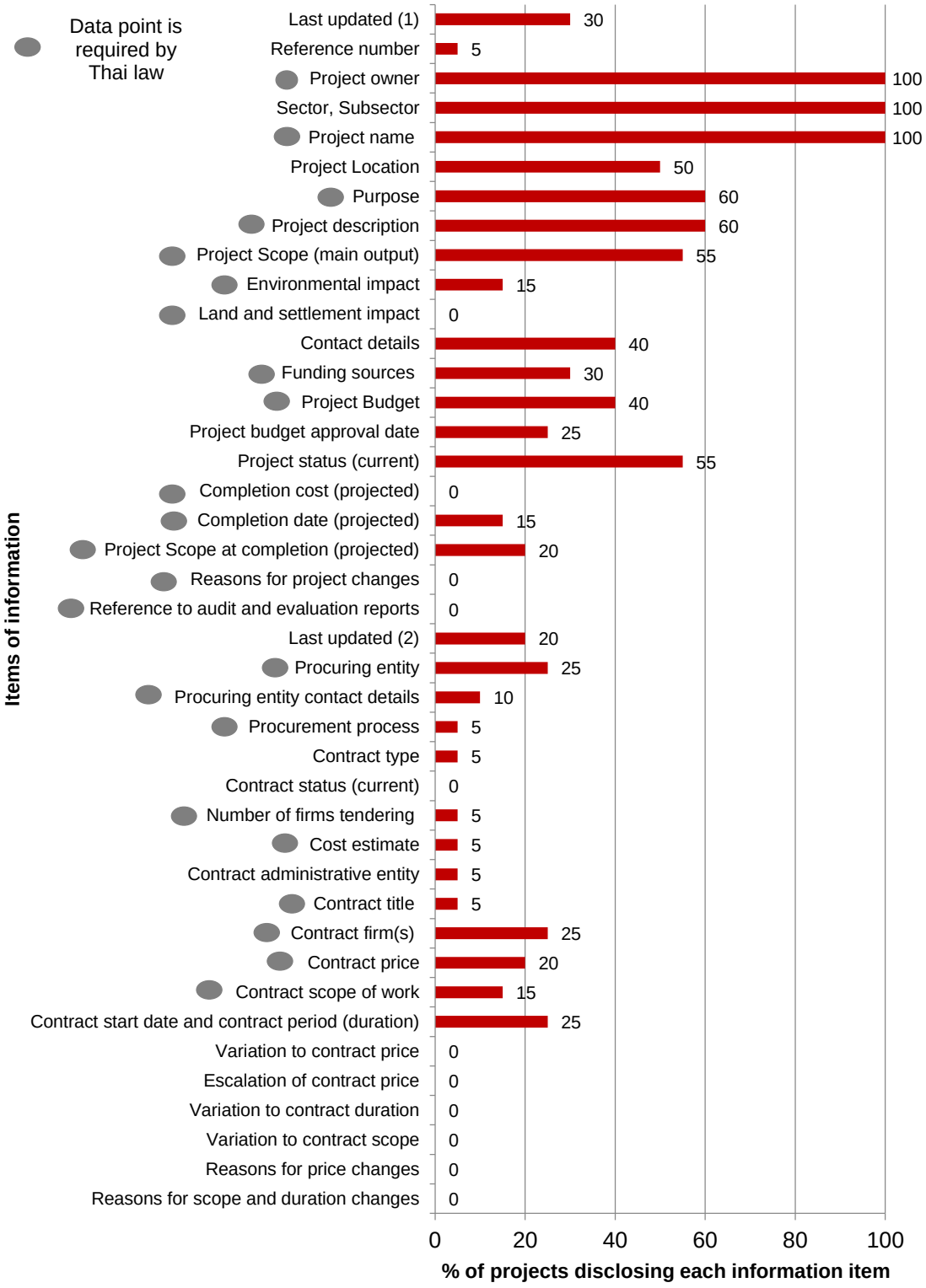


As mentioned previously, just 23 of the 40 data points (58%) are legally required for proactive disclosure. Overall, basic project information is disclosed such as project owner, sector/subsector, name, location, project purpose, description, scope and status. However, the more crucial pieces of information listed below are rarely disclosed:

- Environmental impacts report and land and settlement impact report;
- Completion cost (projected) and reasons for project changes, reference to audit and evaluation reports;
- Procurement process, number of firms tendering, cost estimate;
- Contract status, contract type and variation to and escalation of contract price, variation to contract duration and variation to contract scope; and,
- Reasons for price changes and scope and duration changes.

Please see Figure 6.5 for a complete overview of the disclosure rates in relation to each of the 40 CoST IDS data points. However, it should be noted that although a lot of information is often missing from PE websites, project progress is normally disseminated through the media and published in PEs' annual report.

Figure 6.5: Information disclosed in 20 sample projects in accordance with CoST IDS



Although the OIA 1997 requires the disclosure of environmental and land settlement impacts, this information is rarely disclosed. There are two reasons for this: firstly, there are no sanctions or effective enforcement of the law; secondly, uploading these reports onto PE websites require enormous amounts of server space. As a result, citizens must send an official letter to request reports which will often be provided in hard copy form. There are instances in which EIA, feasibility study report and land and settlement impact reports are published; for example, when SOEs create project specific websites. This is the case of the SRT's Railway Red Line (Bang Sue-Rangsit), the MRT's Metro Blue Line (Extension) and the Laem Chabang Port extension.

Even where information is disclosed on PE websites, this information is usually deleted a year after the procurement process is completed; once construction is underway, the public is unlikely to have continued access to this information. Generally, procurement documents can be found on the CGD's website, except in the case of SOEs. There are no centralised public agencies, including CGD and SEPO, which keep this information in their databases.

In relation to contract information, the results are similar to the TDRI's 2013 survey of SOEs. Generally, PEs do not disclose details on contractors. They are often concerned about rules on trade secrets and potential civil lawsuits against the public officials who publish the contracts. It is possible that there is a lack of understanding, whereby some public officials are uncertain whether the disclosure of the contracts will violate trade secrets law. As a result, these officials err on the side of caution choosing not to publish entire contracts (including contract price). In order to address this issue, the government should provide clear guidelines detailing what can and cannot be disclosed.

From the sample and analysis, the following conclusions can be drawn. Firstly, over half of the CoST IDS data points currently required to be disclosed proactively by law. Existing legal requirements mandate 67% of the CoST IDS project phase data points to be disclosed, in comparison to 45% legal requirement to disclose in the contract phase[35]. Evidently, Thai regulations place greater emphasis on project identification and preparation, as opposed to procurement and implementation. There is therefore scope for CoST to fill the gaps and support transparency throughout the project lifecycle. Secondly, in practice, compliance with both Thai legal requirements and the CoST IDS is low at 27% and 24% respectively. CoST has a role to play in strengthening compliance with transparency requirements, including capacity building and training to increase public officials' understanding of what is required and what is permitted.

Recommendation 8

In order for CoST to fully succeed in Thailand, there must be a legal mandate for CoST. This will demonstrate that CoST has the support at the highest political levels. CoST should work with the government to enshrine CoST in legislation, regulation or other legal instrument.

[35] In measuring the overall compliance with the CoST IDS, 'Date' (which appears in both the Project and Contract phase) is only counted once; this totals 40 data points. However, when measuring compliance in the individual phases (Project vs. Contract), 'Date' is counted as one data point in each phase.

Recommendation 9

CoST is currently being applied to selected projects under SEPO, CGD and AOT. At the time of writing, the Cabinet decided that CoST should be expanded to projects worth over 1 billion baht. CoST should continue working with all stakeholders to ensure that CoST implementation is scaled up over time so that in the long-run it will apply to all public infrastructure PEs and projects.

Recommendation 10

CoST should pursue the development of a centralised/single window platform for information disclosure. However, as this process will take time, CoST should, in the interim, capitalise on existing PE websites to enable greater disclosure. In addition, CoST should work with SEPO, CGD and AOT to deliver comprehensive training programmes to upskill PE officials on how to use the platform and what information should be uploaded.

Recommendation 11

The decentralised nature of government means that different rules and regulations apply to PEs at the central, municipal and provincial levels. In devising a strategy for scaling up CoST in Thailand, CoST must take into account these variations to ensure applicability across all levels of government procurement.

Recommendation 12

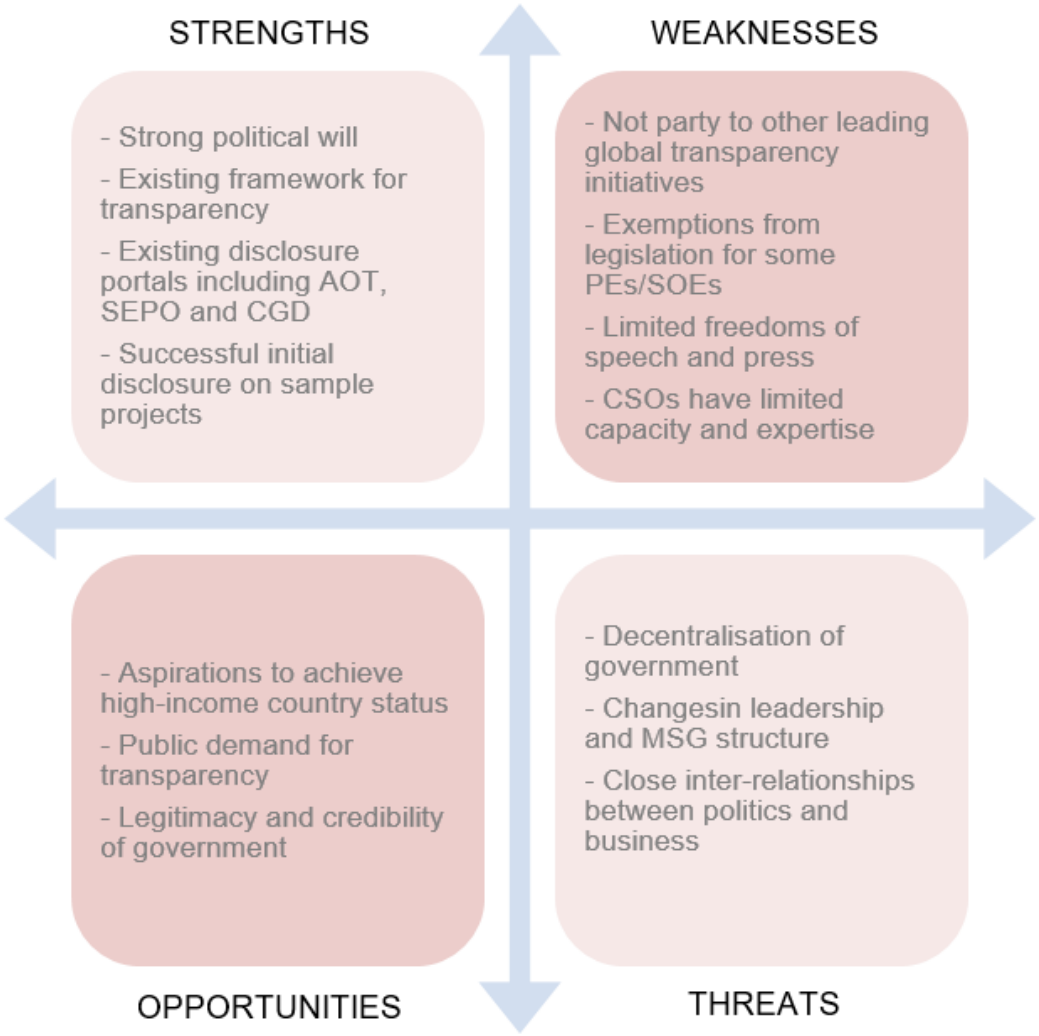
CoST should introduce awards to incentivise transparency. For example, Metropolitan Rapid Transit (MRT) is the best performing SOE in terms of compliance with legal and CoST requirements. Although, legal compliance is less than 50%, MRT is still ahead of the second most compliant SOE by almost 10 points. Recognising this effort through an award such as the 'most transparent' PE would encourage greater compliance in the future.

Conclusions and Recommendations

Conclusions and Recommendations

Both the literature review and sample data analysis demonstrate the relevance of CoST, especially in terms of strengthening institutions, expanding civic spaces and improving disclosure standards and performance in Thailand's public infrastructure sector. A more detailed analysis of the applicability and viability of CoST can be found in the SWOT analysis below.

SWOT Analysis of CoST in Thailand



Please find a brief explanation of the points made in the SWOT below. For a fuller understanding, please refer to the main body of the study.

Strengths

CoST Thailand enjoys strong political support from the highest levels of government. The Permanent Secretary of the Ministry of Finance is currently the Chair of the MSG. Since joining in 2015, it has grown from an initial pilot on AOT's Suvarnabhumi International Airport to cover selected public infrastructure projects under SEPO and CGD. CoST International is confident that implementation will continue to be scaled up over time.

CoST is compatible with Thai transparency laws; the baseline study highlighted that 58% of the CoST IDS is already mandated by law and there is scope to expand these transparency requirements. There is potential for CoST to strengthen the existing framework not just in terms of transparency requirements but also PE compliance rates.

Internet penetration in Thailand is high, with 42.7% of the population having access to the internet (Internet Live Stats, 2017). As such, it is extremely beneficial that Thailand has already developed various disclosure platforms, including those of CGD and AOT, which support access to information. CoST Thailand can build on this momentum to further strengthen information access through the creation of a single-window platform for CoST disclosure. CGD and AOT are already disclosing on a number of sample projects online and this is expected to increase in the coming years.

Weaknesses

Although Thailand has committed to implementing CoST, it has yet to become a member of other leading international transparency initiatives such as OGP or EITI. As such, Thailand's experience of global best practice initiatives is still in its early stages.

In spite of the existing transparency framework, there are various exemptions that apply to certain SOEs and PEs at both the national and local levels. This could cause confusion and lead to a lack of uniformity in the application of CoST, which would in turn weaken its impact.

Civic space in Thailand is limited; Freedom House rates Thailand as 'Not Free' in terms of freedoms in the world and freedoms of press. The restrictions on civil society and the media have had a negative impact on the effectiveness of citizen monitoring and social auditing. Civil society in Thailand is reported to lack the capacity and expertise to hold the authorities to account. As a multi-stakeholder initiative, civil society participation is key to CoST. Without this fundamental cornerstone, the principles of CoST are undermined.

Opportunities

Thailand has aspirations to break out of the middle income trap and become a high income country. As a result, the government has proposed significant investments in infrastructure, including a number of large infrastructure mega projects, primarily in transportation, energy, sanitation, telecommunication and education. CoST can help increase the transparency of these investments; this could lead to governance and efficiency improvements, which in turn could help Thailand to achieve its desired developed country status.

The military Junta seized power following historic corruption allegations against the previous administration. In recent years, there have been various anti-corruption protests and calls to clean up politics in Thailand. There is an increasing appetite amongst the Thai population for transparency and accountability; for example, with the rise of social media, citizens have become increasingly vocal on anti-corruption issues. Given this public demand, the Junta has promised to make anti-corruption a key part of its agenda. As a global initiative, CoST can

help strengthen the legitimacy of these anti-corruption efforts which in turn could increase the credibility of the current administration.

Threats

The decentralised nature of government and existence of numerous autonomous agencies in Thailand could result in poor coordination of efforts and duplication of works. CoST should actively work to break down silos and facilitate communication between all relevant agencies.

Following Cabinet approval of the new operational framework for CoST, a new MSG will be formed to drive CoST forward in Thailand. The transfer process could cause confusion as to which agency has responsibility for CoST. In addition, institutional memory gained by the MSG in the last three years – relating to CoST implementation and its principles – could be lost. This could cause delays to, or paralyse, CoST implementation.

There is a history of mutually beneficial inter-relationships between government and industry which have undermined the integrity of public infrastructure investments and anti-corruption efforts. Unless the business-politics nexus is addressed, measures to improve governance or reduce corruption will be ineffective.

Recommendations

To conclude, below is a list of the twelve recommendations made in this study:

Recommendation 1

Although Bangkok is the economic and administrative capital and CoST operations are based in the city, efforts should be made to engage the wider demographic including rural populations.

Recommendation 2

SOEs will be responsible for approximately 85% of total infrastructure investment but are widely reported to be inefficient or poorly managed; CoST should ensure that SOEs responsible for procuring public infrastructure are actively targeted and included in CoST implementation in Thailand.

Recommendation 3

Thai roads are reported to be the second deadliest in the world due to poor monitoring and minimal inspections. CoST IDS should be adapted to include additional parameters such as the number of fatalities, the number of accidents, accident location and date of last inspection, to increase understanding and enable identification of relevant remedial actions.

Recommendation 4

Civic space in Thailand is limited; CoST must engage the government to lobby and advocate for greater opportunities for citizen participation. One ready-made opportunity is the CoST multi-stakeholder approach which provides safe space for dialogue between government, industry and citizens.

Recommendation 5

Civil societies in Thailand are relatively small in size and number, and lack resources, expertise and experience to effectively engage with the government. CoST should include dedicated activities to build civil society capacity to strengthen demand for information and enable monitoring of projects.

Recommendation 6

Given the limited press freedoms in Thailand, coupled with the prevalence of state-controlled media agencies, CoST implementation must include a programme for building the capacity of the local press and media. This should centre on the importance of integrity and objectivity in reporting and investigative journalism. Media officials must be made the understand their duties and responsibilities in disseminating information to citizens. CoST should also work with the media to advocate for greater freedom of press.

Recommendation 7

In Thailand, enforcement of regulations is often weak. CoST should partner with the existing oversight agencies such as the NACC, OAG, PACC and others, to share data, highlight discrepancies and support their efforts to monitor public infrastructure projects.

Recommendation 8

In order for CoST to fully succeed in Thailand, there must be a legal mandate for CoST. This will demonstrate that CoST has the support at the highest political levels. CoST should work with the government to enshrine CoST in legislation, regulation or other legal instrument.

Recommendation 9

CoST is currently being applied to selected projects under SEPO, CGD and AOT. At the time of writing, the Cabinet decided that CoST should be expanded to projects worth over 1 billion baht. CoST should continue working with all stakeholders to ensure that CoST implementation is scaled up over time so that in the long-run it will apply to all public infrastructure PEs and projects.

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CoST should pursue the development of a centralised/single window platform for information disclosure. However, as this process will take time, CoST should, in the interim, capitalise on existing PE websites to enable greater disclosure. In addition, CoST should work with SEPO, CGD and AOT to deliver comprehensive training programmes to upskill PE officials on how to use the platform and what information should be uploaded.

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References

Aidt, T.S., 2009. Corruption, institutions, and economic development. Oxf. Rev. Econ. Policy 25, 271–291.

Buchanan, J.M., Tullock, G., 1965. The calculus of consent: Logical foundations of constitutional democracy. University of Michigan Press.

Deunden Nikomborirak and Tippatrai Saelawong. TDRI (August 2013.) Access to Information and Anti-Corruption in Thailand. (Only in Thai). Thailand Development Research Institute.

Deunden Nikomborirak et al, 2015. Assessment of the Effectiveness of the Independent Anti-corruption bodies established by the Constitution in 1997. Thailand Development Research Institute.

EIT, 2000. Solution to the non-transparent of the Thai construction industry. Presented at the Solving Corruption Problem in Thai Construction Sector, Engineering Institute of Thailand (EIT), United Nation Building, Thailand.

EIT, 2010. Guidelines for Construction Management and Supervision. Engineering Institute of Thailand (EIT).

Hendrickson, C., Au, T., 1989. Project management for construction: Fundamental concepts for owners, engineers, architects, and builders. Chris Hendrickson.

International Cost Engineering Council, 1996. What are Cost Engineering, Quantity Surveying and Project Management? Resources.

Kaufmann, D., Kraay, A., Mastruzzi, M., 2011. The worldwide governance indicators: methodology and analytical issues. Hague J. Rule Law 3, 220–246.

Kothari, U., 2005. A radical history of development studies. Zed London.

Local Development Institute, 2004. Project Research for Corruption in a Government Organization: Case Study of The Ministry of Transport. The National Economic and Social Advisory Council.

Misangyi, V.F., Weaver, G.R., Elms, H., 2008. Ending corruption: The interplay among institutional logics, resources, and institutional entrepreneurs. Acad. Manage. Rev. 33, 750–770.

Missingham, B., 2003. The assembly of the poor in Thailand: From local struggles to national protest movement. Silkworm Books.

NACC, 2014. Report of Seminar concerning Public Project Cost Estimation. NACC Office.

Noppanun Wanathepsakul, 2006. Political Construction-Construction Politics: a road to devastation in Suvanabhumi.

Pasuk Phongpaichit, Baker, C.J., 2002. Thailand, economy and politics. Oxford University Press Oxford.

Pathmanand, U., 2001. Globalization and democratic development in Thailand: the new path of the military, private sector, and civil society. Contemp. Southeast Asia 24–42.

Persson, A., Rothstein, B., Teorell, J., 2010. The failure of Anti-Corruption Policies A Theoretical Mischaracterization of the Problem. QoG Work. Pap. Ser. 19, 19.

Piriyarangsan, S., Treerat, N., Wanathepsakul, N., 2004. Corruption: Politicians, Bureaucrats, and Business people. Tha National Economic and Social Advisory Council.

Rose-Ackerman, S., 1999. Corruption and government: Causes, consequences, and reform. Cambridge University Press.

Sanabboon, M., 2008. The effect of Bang-pa-kong Dam. OK Nation.

Shleifer, A., Vishny, R.W., 1993. Corruption. Q. J. Econ. 108, 599–617.

Shleifer, A., Vishny, R.W., 2002. The grabbing hand: Government pathologies and their cures. Harvard University Press.

Stansbury, N., 2005. Exposing the foundations of corruption. Constr. Glob. Corrupt. Rep. 2005, Corruption in Construction and Post-Conflict Reconstruction.

Torplus Yomnak, 2015. Corruption in Thailand: A Study of Corruption and Anti-Corruption Reforms in Thailand's Construction Sector (PhD thesis). University of Cambridge, Cambridge, UK.

Urra, F.J., 2007. Assessing Corruption An analytical review of Corruption measurement and its problems: Perception, Error and Utility. Edmund Walsh Sch. Foreign Serv. Georget. Univ. Httpgovernance Dev. OrguploadsmediagovernanceAssesing 20Corruption 20.

Online sources

Airports of Thailand (AOT) (2015) Airport Transport Statistics (in Thai) [Online], Available: http://aot-th.listedcompany.com/transport.html [1 December 2016]

American Association of Port Authorities (2014) World Port Rankings [Online], Available via: http://www.worldshipping.org/about-the-industry/global-trade/ports [1 December 2016]

Amnesty International (2015) Thailand: Military's shutdown of event highlights free speech crackdown [Online], Available: https://www.amnesty.org/en/latest/news/2015/06/thailand-militarys-shutdown-of-event-highlights-free-speech-crackdown/ [31 October 2016]

Bangkok Post (2012) Property in Thailand, part 3 can the government take it away? [Online], Available: http://www.bangkokpost.com/print/312580/ [3 February 2017]

Bangkok Post (2014) 3G case against NBTC dismissed [Online] Available: http://www.bangkokpost.com/tech/local-news/427595/3g-case-against-nbtc-dismissed

Bangkok Post (2015) Thailand's roads second-deadliest in world, UN agency finds, [Online], Available: http://www.bangkokpost.com/learning/work/738124/thailand-roads-second-deadliest-in-world-un-agency-finds [31 October 2016]

Bangkok Post (2016) City traffic jams burn up B97m of fuel a day, [Online], Available: http://www.bangkokpost.com/learning/work/738124/thailand-roads-second-deadliest-in-world-un-agency-finds [31 October 2016]

BBC (2017) Life and death on Thailand's lethal roads, [Online], Available: http://www.bbc.co.uk/news/world-asia-38660283 [23 January 2017]

Benar News (2015) Thai Printer Refuses to Publish US Paper's Article on Thailand [Online], Available: http://www.benarnews.org/english/news/thai/NYT-article-redacted-12012015180304.html [31 October 2016]

BTS Group (2015) BTS Annual Report 2015, Limitless Possibilities [Online], Available: http://bts.listedcompany.com/misc/ar/20160621-bts-ar201516-th-02.pdf [31 October 2016]

Central Intelligence Agency (2016) The World Factbook: East and Southeast Asia – Thailand, [Online], Available: https://www.cia.gov/library/publications/the-world-factbook/geos/th.html [1 December 2016]

CNBC (2013) This Asian nation faces a growing crisis from aging, [Online], Available: http://www.cnbc.com/2013/10/23/thailand-the-old-man-of-southeast-asia.html [1 December 2016]

The Diplomat (2016) Thailand's Draconian Cyber Law Sparks Rights Fears [Online], Available: http://thediplomat.com/2016/12/thailands-draconian-cyber-law-sparks-rights-fears/ [13 January 2017]

Department of Airports (2015) Statistics of Air Transportation (in Thai) [Online], Available: http://www.aviation.go.th/upload/download/file_5abc1f8fed585e55cff7dd41abe52a07.pdf [1 December 2016]

Electricity Generating Authority of Thailand (EGAT) (2015) EGAT Annual Report (in Thai) [Online], Available: http://www.egat.co.th/images/businessop/annual-report/2558/annual-report-58-th.pdf [1 December 2016]

Environmental Justice Atlas (2016) Pak Bara deep sea port project, Thailand [Online], Available: https://ejatlas.org/conflict/pak-bara-deep-sea-port-project-thailand [31 October 2016]

Fiscal Policy Office (2016) Thailand's Economic Outlook 2016 : July [Online], Available: http://www.fpo.go.th/FPO/modules/Content/getfile.php?contentfileID=11961 [23 Jan 2017]

Fortify Rights (2015) Thailand: Drop Defamation Cases Against Schoolgirl, Journalists, Villagers [Online], Available: http://www.fortifyrights.org/publication-20160212.html [31 October 2016]

Greenpeace Thailand (2015) The Human Cost of Coal Power: How coal-fired power plants threaten the health of Thais [Online], Available: www.greenpeace.or.th/Thailand-human-cost-of-coalpower/en.pdf [1 December 2016]

The Guardian (2015) Thai printers refuse to publish New York Times edition over article about king [Online], Available: https://www.theguardian.com/world/2015/sep/22/new-york-times-thailand-lese-majeste-laws [31 October 2016]

iCONS (2011) คมนาคมดัน แลนด์บริดจ์-ปากบารา. (in Thai) [Online], Available: http://icons.co.th/newsdetail.asp?lang=TH&page=newsdetail&newsno=26454 [31 October 2016]

iCONS (2012) ท่าเรือสงขลา2ส่อล่ม หลังสิ่งแวดล้อมไม่ผ่าน. (in Thai) [Online], Available: http://www.icons.co.th/newsdetail.asp?lang=EN&page=newsdetail&newsno=29738 [31 October 2016]

Internet Live Stats (2017) Thailand Internet Users [Online], Available: http://www.internetlivestats.com/internet-users/thailand/ [23 Jan 2017]

Isranews (2015) Cancellation of official 3.5 billion loan for water management, [Online], Available: http://isranews.org/isranews-news/item/36658-3-5_36658.html [31 October 2016]

Manager Online (2015) “สมคิด” เร่งคมนาคมลงทุน PPP ลดภาระรัฐ
จี้สรุปเดินรถสีน้ำเงินและแอร์พอร์ตลิงก์ต่อขยาย. [Online], Available: http://www.manager.co.th/iBizChannel/ViewNews.aspx?NewsID=9580000102282 [1 December 2016]

Marine Department (2013) Statistics on Water Transportation of Chao Phraya and Pasak. [Online], Available: http://md.go.th/stat/index.php/transport-information [1 December 2016]

McKinsey and Company (2011) Asia’s $1 trillion infrastructure opportunity, [Online], Available: http://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/asias-1-trillion-infrastructure-opportunity [31 October 2016]

Ministry of Energy: Department of Alternative Energy Development and Efficiency (N/A) The 10-Year Alternative Energy Development Plan [Online], Available: http://weben.dede.go.th/webmax/content/10-year-alternative-energy-development-plan [31 October 2016]

The Nation (2013) Logistics cost-to-GDP ratio not the issue, expert says [Online], Available: http://www.nationmultimedia.com/news/business/EconomyAndTourism/30206492 [1 December 2016]

The Nation (2016) Review urged on high-speed rail projects [Online], Available: http://www.nationmultimedia.com/news/business/macroeconomics/30289618 [31 October 2016]

The Nation (2016) Mekong region could rely on 100% clean energy by 2050: WWF [Online], Available: http://www.nationmultimedia.com/news/national/aec/30286636 [31 October 2016]

National Statistics Office (2015) The 2015 Household Socio-Economic Survey Whole Kingdom [Online], Available: http://web.nso.go.th/en/pub/data_pub/E2-001-F-58-00-000-000-B.pdf [23 Jan 2017]

Office of Transport and Traffic Policy and Planning, Ministry of Transport (2015) [Online], Available: http://www.otp.go.th/images/stories/PDF/2558/ActionPlan2558/ActionPlan2.pdf [31 October 2016]

Post Today (2015) Defending Investment for Thailand as "High-income Country" [Online], Available: http://www.posttoday.com/analysis/report/388250 [1 December 2016]

Prachatai (2009) Locals say no to second deep sea port in Songkhla [Online], Available: http://www.prachatai.com/english/node/1528 [31 October 2016]

Reuters (2016) Thailand seeks to tighten cyber security, raising questions about privacy protection [Online], Available: http://www.reuters.com/article/us-thailand-cyber-idUSKBN13H0VE [1 December 2016]

Security Week (2016) Thailand Detains Nine for Hacks Protesting Cyber Law [Online], Available: http://www.securityweek.com/thailand-detains-nine-hacks-protesting-cyber-law [13 January 2017]

SEPO (2015) State enterprise review: State Railway of Thailand (October 1, 2014 – September 30, 2015), [Online], Available: http://www.sepo.go.th/tinymce/plugins/filemanager/thumbs/ser58_3/8.pdf [4 February 2017]

Seub Nakhasathien Foundation (2010) คนสตูลลุกขึ้นสู้ : ปิดประตูอุตสาหกรรมที่ปากบารา (in Thai) [Online], Available: http://www.seub.or.th/index.php?option=com_content&view=article&id=464:seubnews&catid=5:2009-10-07-10-58-20&Itemid=14 [31 October 2016]

Siam Commercial Bank Economic Intelligence Centre (2015) Insight: Thai transport mega-projects pave way for countless business opportunities [Online], Available: https://www.scbeic.com/en/detail/file/product/1741/e8zsztf6cf/EIC_insight_ENG_infrastucture_q4_2015.pdf [31 October 2016]

Southeast Asian Press Alliance (2016) [Thailand] ThaiPublica challenges the army to test the right to know law [Online], Available: https://www.seapa.org/thaipublica-challenges-the-army-to-test-the-right-to-know-law/ [1 February 2016]

Sun&Wind Energy (2016) Understanding the Thai renewable energy market [Online], Available: http://www.sunwindenergy.com/review/understanding-thai-renewable-energy-market [31 October 2016]

Thailand Construction News (2015) Prajin sets deadline for Pak Bara port plan [Online], Available: http://www.thailand-construction.com/prajin-sets-deadline-for-pak-bara-port-plan/ [31 October 2016]

Thailand Transport Portal (2016) Airport Transportation Statistics (in Thai) [Online], Available: http://www.mot.go.th/statmot.html?id=12 [1 December 2016]

Thaipublica April 18, 2014. คำวินิจฉัยศาลรัฐธรรมนูญ กรณีเงินกู้ 2 ล้านล้านบาท ปิดประตูออกพ.ร.บ.ระดมทุนทำอภิมหาโปรเจกต์. http://thaipublica.org/2014/04/mega-projects-constitutional-court/

Thaipublica, March 23, 2013. เปิดร่าง พ.ร.บ.กู้เงิน 2 ล้านล้านบาท พร้อมกรอบการใช้เงินกว้างๆ. http://thaipublica.org/2013/03/bill-to-borrow-2-2-trillion-THB/

TomTom (2016) TomTom Traffic Index 2016 [Online], Available: http://www.tomtom.com/en_gb/trafficindex/ [1 December 2016]

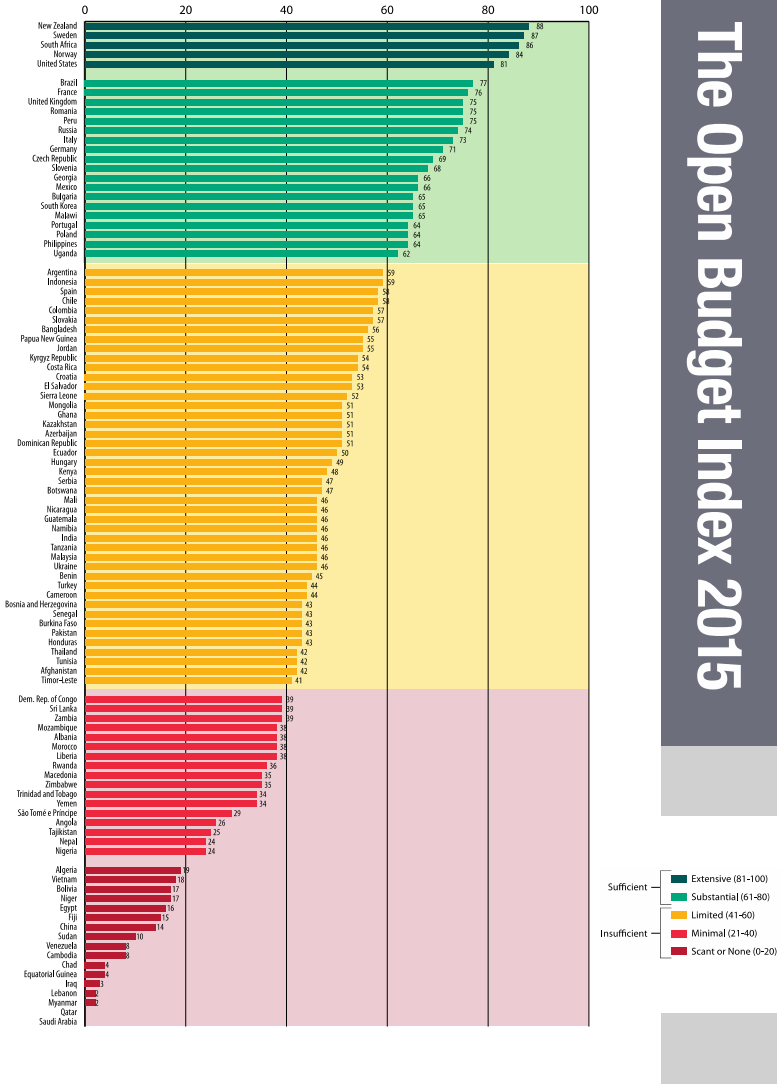
World Bank (2016) Thailand: Overview, [Online], Available: http://www.worldbank.org/en/country/thailand/overview [1 December 2016]

World Health Organization (2015) Global Status Report on Road Safety 2015, [Online], Available: http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/ [31 October 2016]

Appendix

A1. Open Budget Index Scores 2015 (International Budget Partnership, 2016

http://www.internationalbudget.org/wp-content/uploads/OBS2015-OBI-Rankings-English.pdf



A2. Methodology of TDRI's 2013 online procurement information disclosure survey

The survey is based on three weighted criteria; (1) Ease of access to information (2%) (2) Quality and Completeness of information (40%) and (3) Stock and Searchability (3%)

Ease of access to information (25%)

Ease of access to information assesses how simply and quickly a visitor of an SOE's website can find the information or the means of access to the information. The surveyor focuses on two points. Firstly, it sees whether the website in question has a menu bar informing visitors about the means of accessing this information such as "procurement" or "procurement information" (wherever it is placed). Secondly, it assesses whether the visitor can see the information expected after clicking on that menu.

Quality and Completeness of information (40%)

Simply disclosing information is not enough. The information disclosed should be complete, up-to-date and reliable. The most reliable and useful procurement information is a copy of the procurement contract (in .PDF) accompanied by machine-processable text (in HTML).

Stock and Searchability (35%)

Grouping all information together without any classification or grouping can cause an obstacle for citizens in finding the data they require. Therefore, three additional conditions are needed to facilitate access to information.

First, the surveyor checks whether the website still keeps the past procurement documents, such as announcements, ToRs, and reference prices. The OIA 1997 requires the PEs to keep this information on their website, for at least one year after publication.

If the first condition is met, the resulting question is how far back the information is kept. The calculation is based on the number of years.

An SOE's website with good quality and complete information may contain a significant amount of documentation. The surveyor will then consider whether the information is grouped or whether there is a search tool created on the website to facilitate visitors' access to information.

Source: Deunden Nikomborirak and Tippatrai Saelawong (August 2013)

A3. Projects from sample assessment

List of projects and SOEs in the sample assessment of compliance with legal requirements and CoST IDS

Sector	Project Owner	Project name	More information
Transportation and logistics	SRT	Railway vicities of Bangkok Red Line (Talingchan-Siriracha)*	http://www.railway.co.th
		Railway vicities of Bangkok Red Line (Bang Sue-Rangsit)*	http://www.railway.co.th
		Railway vicities of Bangkok Red Line (Bangsue-Talingchan)*	http://www.railway.co.th
		Railway track rehabititation phase 5	http://www.railway.co.th
		Railway track rehabititation phase 6	http://www.railway.co.th
	MRT	Metro Green Line (extension), Bangkok*	https://www.mrta.co.th/
		Metro Blue Line (Extension), Bangkok*	http://www.mrta-blueline.com/
	Department of Highways	Motorway	http://it-programmer.doh.go.th
	EXAT	Expressway, Bangkok	http://www.exat.co.th
	AOT	Suvarnabhumi Airport Extension Phase 2*	http://suvarnabhumiairport.com
	Department of Rural Roads	Local road, Samut Sakhon Province (West of Bangkok)	http://www2.drr.go.th
	Laem Chabang Port	Port extension*	http://www.lcp-a.com
Power	EGAT	Jana Power Plant	http://projects-pdp2010.egat.co.th/
		Wang Noi Power Plant	http://projects-pdp2010.egat.co.th/
		Phra Nakhon Nuea power plant	http://projects-pdp2010.egat.co.th/
	PEA	Biomass Power Plant	https://www.pea.co.th
	PTT Tank Terminal Company Limited	Expansion of tanks for new petrochemical products	http://www.pttplc.com
Water management	Bangkok Metropolitan	Flooways	http://dds.bangkok.go.th
	Wastewater Management Authority	Wastewater treatment stations	http://www.wma.or.th/
	Royal Irrigation Department	the extension of Mae Kuang Udom Thara Dam (Chiang Mai)*	http://lproject.rid.go.th/

*Project is ongoing



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