

Assurance Report
Construction Sector Transparency Initiative (CoST) Thailand
In Fiscal Year 2017
Public Edition



- Hat Yai Flood Relief Project (Phase 2), Songkhla Province, Royal Irrigation Department, Ministry of Agriculture and Cooperatives.
- Runway and taxi way construction project at Betong Airport, Yala Province, Department of Airports, Ministry of Transport.
- Demolish and reconstruct the Institute of Dermatology building, Department of Medical service, Ministry of Public Health.
- Rama III-Dao Khanong-Western outer Bangkok Ring Special Expressway, Expressway Authority of Thailand.

Proceedings by
Assurance team

Thammasat University Research and Consultancy Institute

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1. Introduction

Construction Sector Transparency (CoST) is a project initiated by UK Department for International Development with the support of the World Bank in 2007. Currently, there are 15 members: Afghanistan, El Salvador, Ethiopia, Guatemala, Honduras, Malawi, Botswana, Philippines, Tanzania, Uganda, Ukraine, Vietnam, Zambia, England and Thailand. The principle of transparency in public construction projects has been systematically provided for disclosure of construction projects to the public at all stages of implementation. And also includes a validation process of disclosed data by Assurance Team (AT). In order that all interested stakeholders can access information more conveniently and quickly, and attach these information in their complaints in accordance with the legal process to the responsible person in case of abnormality of the construction project. To effectively allocate government budgets and worth for tax. To maximize benefit return to society.

Thailand introduced the concept of transparency project in government construction, starting with State Enterprise Policy Office (SEPO) has applied for membership of CoST and CoST International which be approved as membership on September 22, 2014, and SEPO also acted as Secretary of the CoST in Thailand (Nation Secretariat). Subsequently, the Cabinet passed a resolution on January 10, 2017, setting up a committee to promote and support transparency in the construction of the public sector (CoST Committee) acting as a Multi-Stakeholder Group (MSG) of Thailand, with the permanent Secretary of the Ministry of Finance as committee chairman and the Comptroller General's Department (CGD) is the director and secretary, has the authority to oversee the implementation of the CoST program of government agencies. CoST committee consist of representatives from all sectors acting as a group. There are 15 stakeholders from the public, private and civil society in Thailand. They are responsible for determining the guidelines and regulations related to disclosure including other mechanisms to enhance transparency in the construction of state agencies. For project information, transparency in government construction. The Construction Sector Transparency (CoST) of Thailand can be found at www.cgd.go.th/cs/internet/internet/โครงการคืออะไร.html

2. Expected benefits from CoST program

The implementation of CoST in the Thai government has benefited the following sectors:

1. Government Sector: When it comes to transparency in government construction, the public sector can save budgets for public sector investment because it reduces trade channels for the benefit of the authorities, as all stakeholders must work with transparency, accountability, and verifiable in every dimension. As result of more efficient use of budget, the infrastructure is of a higher quality. The rest of the budget can be used for other economic and social missions to ensure investor and ensure investor confidence in local businesses.
2. Business sector: Equal competition leads to affordable and quality business contracts. An investment-friendly environment makes investment worthwhile and more return on investment because it can better predict and reduce risk.
3. Civil society: As civil society supervision and oversight is enhanced, people will take more responsibility and will get fully benefit worth tax paid. Get better service and a safer environment.

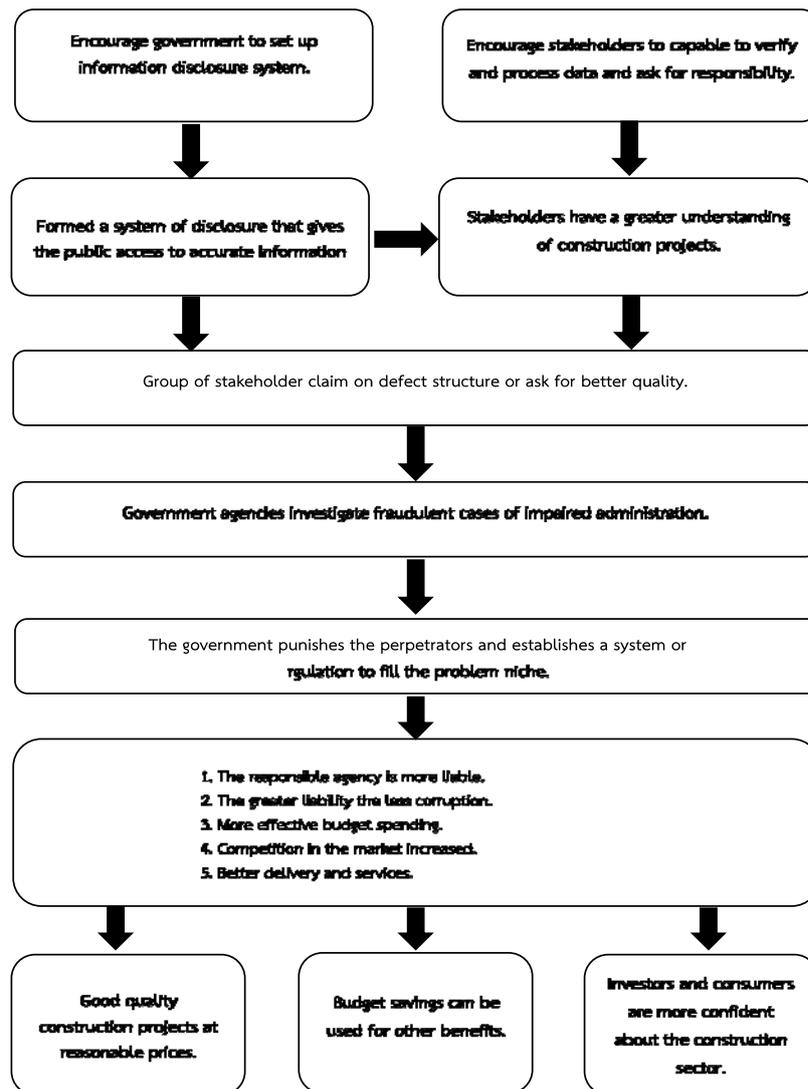


Figure 1: The continuity of data from the implementation of CoST to the Thai government sector.

Assurance Team collected and disclosed 4 pilot projects according to CoST guidelines in Thailand as

1. Hat Yai Flood Relief Project (Phase 2), Songkhla Province, Royal Irrigation Department, Ministry of Agriculture and Cooperatives.
2. Runway and taxi way construction project at Betong Airport, Yala Province, Department of Airports, Ministry of Transport.
3. Demolish and reconstruct the Institute of Dermatology building, Department of Medical service, Ministry of Public Health.
4. Rama III-Dao Khanong-Western outer Bangkok Ring Special Expressway, Expressway Authority of Thailand.

3. Project data disclosed

All four pilot projects will have to disclose throughout the duration of the project, based on 39 CoST guidelines, known as proactive. The disclosure is subject to Thailand's legal framework and all information must be verified and approved by all four project owners prior to disclosure to the public according to CoST regulations.

Table 1: Disclosure of 4 pilot projects.

Operational phase	Data list		Flood relief, Hat Yai	Runway and taxi way, Betong Airport	Institute of Dermatology building	Rama3 expressway
Project identification and presentation	1	Project owner	/	/	/	/
	2	Sector, subsector	/	/	/	/
	3	Project name	/	/	/	/
	4	Project Location	/	/	/	/
	5	Purpose	/	/	/	/
	6	Project description	/	/	/	/
Project preparation	7	Expected outcome	/	/	/	/
	8	Environmental impact	/	/	/	/
	9	Land and settlement impact	/	/	/	/
	10	Details for contacting the staff and the project owner.	/	/	/	/
	11	Funding sources	/	/	/	/
	12	Project Budget	/	/	/	/
	13	Project budget approval date	/	/	/	/
Procurement	14	Procuring entity	/	/	/	/
	15	Procuring entity contact details	/	/	/	/
	16	Terms of reference (TOR)	/	/	/	
	17	Procurement process	/	/	/	
	18	Contract type	/	/	/	
	19	Contract status (current)	/	/	/	
	20	Number of firms tendering	/	/	/	
	21	Cost estimate	/	/	/	
	22	Contract administration entity	/	/	/	
	23	Contract title	/	/	/	
	24	Contract firm(s)	/	/	/	
	25	Contract price	/	/	/	
	26	Contract scope of work	/	/	/	
27	Contract start date and duration	/	/	/		
Implementation	28	Variation to contract price				
	29	Escalation of contract price				
	30	Variation to contract duration				
	31	Variation to contract scope				
	32	Reasons for price changes				
	33	Reasons for scope and duration changes				
Project completion	34	Project status				
	35	Completion cost				
	36	Completion date				
	37	Project Scope at completion				
	38	Reasons for project changes				
	39	Reference to audit and evaluation reports				

4. Assurance result of 4 pilot projects for the fiscal year 2017

(October 1, 2016 – September 30, 2017)

The verification of accuracy and completeness for data disclosure of all 4 projects revealed that they have disclosed all items considered as 100%. This disclosure is under Thai legal framework.

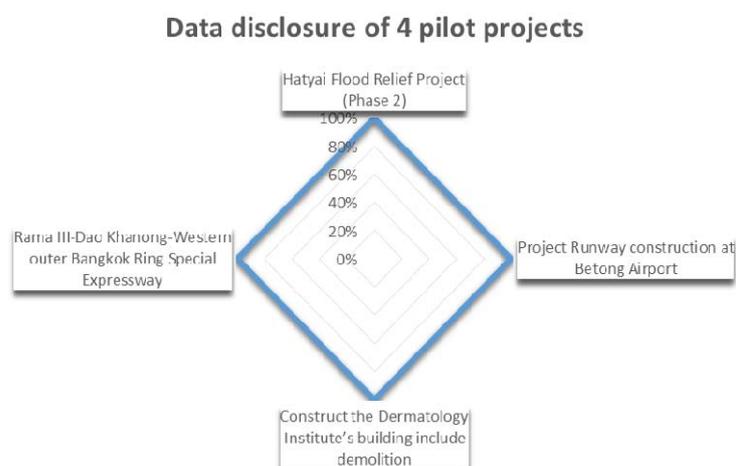


Figure 2: Radar chart shows percentage disclosure of 4 pilot projects

According to disclosure verification classified by operational phase, there are 3 projects already disclosed in third phase such as Hat Yai Flood Relief Project (Phase 2), Songkhla Province, Royal Irrigation Department; Runway and taxi way construction project at Betong Airport, Department of Airports. Demolish and reconstruct the Institute of Dermatology building, Department of Medical service. They had disclosed in the first phase (Project identification and presentation), the second phase (Project preparation), and the third phase (Procurement). Currently, they are under construction as in the fourth phase (Implementation) and disclose progress report monthly. On June 6, 2017, the cabinet approved to run the project Rama3-Dao Khanong-Western outer Bangkok ring road, Expressway Authority of Thailand. Thus the data of phase 1 (project identification and presentation) and phase 2 (project preparation) had been disclosed. Now term of reference (TOR) in phase 3 is drafting. In order to easier to understand, assurance team shows important procurement information in form of chart as per Table 2 and Figure 3

Table 2: Disclosure is based on the stage of the project.

Operational phase	Flood relief, Hat Yai	Airport runway, Betong	Institute of Dermatology building	Rama 3 express way
1. Project identification and presentation	/	/	/	/
2. Project preparation	/	/	/	
3. Procurement	/	/	/	
4. Implementation	/**	/**	/**	
5. Project completion				

Note: ** In-process disclosure by monthly progress report via www.cgd.go.th/cs/internet/internet/CoST.html

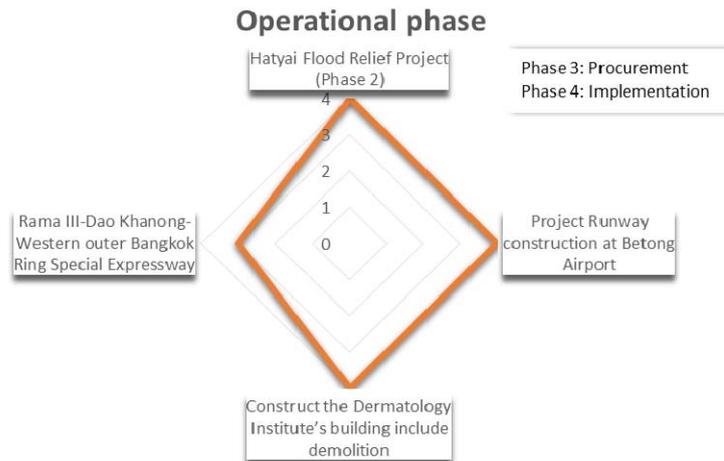


Figure 3: Radar chart shows disclosure based on the operational phase of 4 pilot projects.

In order to have clearer picture of disclosure proportion, assurance team shows the 34th information (Project status) of 3 projects in figure 4. However, the implementation of 3 projects are in the early stage of the contract, the progress of information are not complete.



Figure 4: Proportion of disclosure between progress and delay of 3 pilot projects.

Note: Period of assurance disclosure (April – September 2017)

Figure 4 shows the delay all 4 contracts in Hat Yai flood relief (Phase 2), Songkla province due to flooding in December 2016, the project area was flooded. The contractor cannot complete the construction. Construction work was delayed for two months, as well as a shortage of labor and construction materials, as factories were unable to produce raw materials. Transportation and routes connected to the affected area cannot be transported to the construction site. However, the delays are still in the terms and conditions of the contract.

For the third and first contract, there was 20.09 – 28.26 percent delay which is accord with the observation from the survey of assurance team by June, 2016 -- The project was delayed due to lack of construction materials and labor costs. It may affect the contract duration that may be extend in the future. The project owner should set preventive approach for such problem.

Demolish and reconstruct the Institute of Dermatology building, Department of Medical service has progressed by 15.08%. No delay in disclosure. Runway and taxi way construction project at Betong Airport, Department of Airports has progressed by 21.05% but delay in operation by 0.76%

From information assurance, Assurance Team has summarized the essence of procurement of 4 projects as shown in Table 3.

Table 3 : summarizes the implementation of the procurement regulations of the 4 pilot projects.

Project	Procurement Methodology	Public Publishing	No. of firm tendering	Percentage of budget saving	Contract Type
Hatyai Flood Relief Project (Phase 2), Songkhla Province	First contract: e-Auction (now switch to e-bidding)	Follow procurement regulation but differ from other projects	16 firms	28.23	Unit price
Hatyai Flood Relief Project (Phase 2), Songkhla Province	Second contract: e-bidding	Follow procurement regulation similar to other projects	4 firms	30.39	Unit price
	Third contract: e-bidding	Follow procurement regulation similar to other projects	4 firms	33.05	Unit price
	Fourth contract: e-bidding	Follow procurement regulation similar to other projects	4 firms	32.15	Unit price
Project Runway construction at Betong Airport, Yala Province	e-bidding	Follow procurement regulation similar to other projects	1 firm	12.22	Lump sum
Dismantling and construct the Institute of Dermatology building	e-bidding	Follow procurement regulation similar to other projects	3 firms	10.72	Lump sum
Rama III-Dao Khanong-Western outer Bangkok Ring Special Expressway	e-bidding	Not implement: recently been considered budget on June 6, 2017			

From the above table, all four pilot projects have been operated according to the Office of the Prime Minister's Procurement Act 1992, by means of e-bidding method since the project value above 2 million baht. Considering on bid price and bidding properties, the winner offers below cost estimate which can save the government budget by 12.22 - 39.69 % by project as shown in figure 5. Notice that the most budget saving is the irrigation construction project.

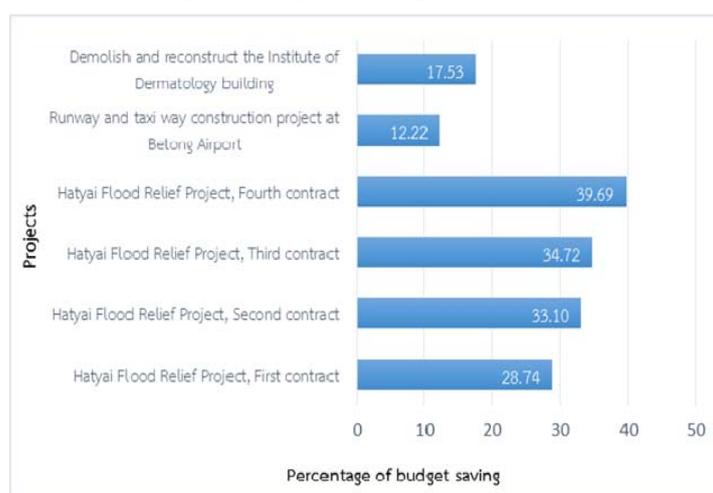


Figure 5 : Comparison on budget saving and budget of 4 projects.

Comparison between cost estimate and contract value of each project found that e-bidding procurement method and separated contract of Hat Yai Flood Relief Project (Phase 2), Songkhla Province can save budget by 28.23-33.05%. Secondly, Runway and taxi way construction project

at Betong Airport, Yala Province can save budget by 12.22% and Demolish and reconstruct the Institute of Dermatology building can save 10.72% as shown in figure 6

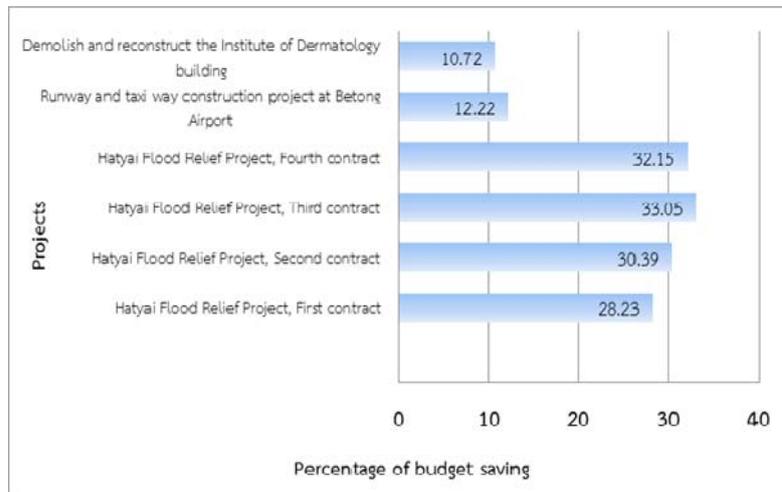


Figure 6: Comparison on procurement budget and cost estimate and contract value of 4 projects.

From Table 4 and Figure 7, the number of tenderer through e-bidding method compared to the number of document buyer and tenderer of each project was similar (not much difference). In contrast to second to fourth contract of Hat Yai Flood Relief Project (Phase 2), Songkhla Province and Runway and taxi way construction project at Betong Airport, Yala Province were quite different. This is a concern in procurement process that needs to check such as examine the qualification of document buyer, and tenderer in depth.

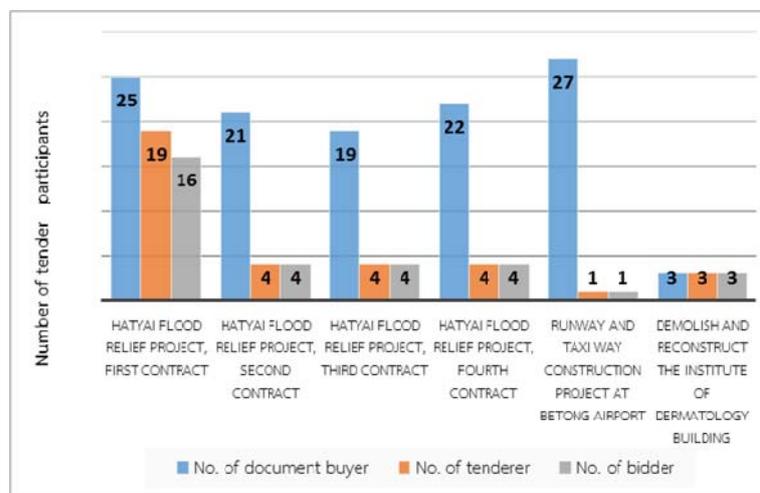


Figure 7: Number of document buyers, tenderer, and bidder of 4 pilot projects.

Disclosure assurance of project implementation in period of April – September 2017 found that Runway and taxi way construction project at Betong Airport, Yala Province has minimal work left (12%). Followed by Hat Yai Flood Relief Project (Phase 2), Songkhla Province has 17% work left. And Demolish and reconstruct the Institute of Dermatology building has 19% work left as shown in figure 8.

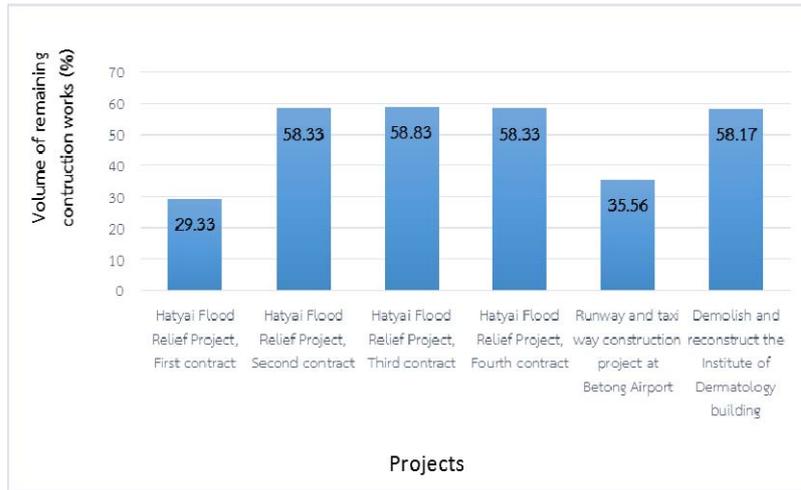


Figure 8: Volume of remaining construction work of 4 pilot projects.

Proportion of contract work left can indicate the efficiency of budget disbursement of the project. And from figure 9, the minimal budget remain project in fiscal year 2017 is Hat Yai Flood Relief Project (Phase 2), Songkhla Province as 2.90%. Next is Demolish and reconstruct the Institute of Dermatology building remain 54.46%. And the maximum budget remain is Runway and taxi way construction project at Betong Airport, Yala Province as 58.90%. This will conflict with the remaining contracted work volume, which left only 12% of the work to be delivered under the contract, as shown in Figure 8. The assurance team has expressed these concerns in the next section.

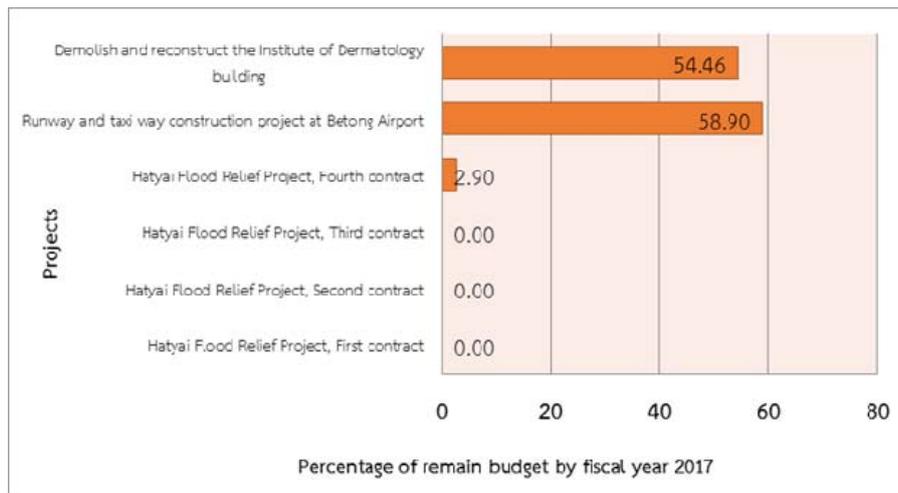


Figure 9: Remaining budget for year 2017 of 4 pilot projects.

Table 4: Summary of the procurement and project contract management of the 4 pilot projects Contract Information by Project

Project Name	Hat Yai Flood Relief Project (Phase 2), Songkhla Province, Royal Irrigation Department				
Item	Contract 1	Contract 2	Contract 3	Contract 4	Project totals
Contract Procurement					
Procuring entity	Royal Irrigation Department.				
Procuring entity contact details	811 Samsen Road, Nakhon Ratchasima sub district, Dusit district, Bangkok 10300				
Contract administrative entity	Large Irrigation Construction Office No. 11, Bureau of Large Scale Water Resources Development, Royal Irrigation Department				
Contract status	Implementation				
Procurement process	e-Auction	e-Bidding			
Contract type	Unit Price				
Number of firms tendering	16	4	4	4	28
Cost estimate, THB	1,875,366,231.51	1,234,067,132.26	1,192,224,717.34	1,044,996,506.91	5,346,654,588.02
Contract title	Renovation of drainage canal R1 with buildings (km 3+813 to km7+400)	Renovation of drainage canal R1 with buildings. (km 7+400 to km 11+600)	Renovation of drainage canal R1 with buildings: (km 11+600 to km16+700)	Renovation of drainage canal R1 with buildings (km 16+700 to km 21+319)	
Contract firm(s)	Siamphan Enterprise Plc.	Siamphan Enterprise Plc.	Peimpoon Engineering Co., Ltd	Chai Charoen Maitree Co., Ltd	
Contract price, THB	1,346,000,000.00	859,000,000.00	798,194,699.55	709,000,000.00	3,712,194,699.55
Contract scope of work	<ol style="list-style-type: none"> Renovation of canal R1 km 3 + 953 to km 7 + 400 Bang Yi 2 Floodgate Bang Yi Pumping Station Work Renovation of 5 bridges Renovation of 19 irrigation buildings 	<ol style="list-style-type: none"> Renovation of canal R1 km 7 + 400 to km 11 + 600 Tha Chang - Bang Klam floodgate Drainage pipe work Tha Chang Renovation of 4 bridges Renovation of 22 water intake buildings 	<ol style="list-style-type: none"> Renovation of canal R1 km 11 + 600 to km 16 + 700 Drainage pipe work Khok Mao 4 jobs Renovation of 8 bridges Renovation of 26 water intake buildings 	<ol style="list-style-type: none"> Renovation of canal R1 km 16+700 - km 20+937 Na Kuan 2 floodgate. Drainage pipe work Klong Tam Drainage pipe work Klong Ward Renovation of 12 bridges Renovation of 31 water intake buildings 	

Project Name	Hat Yai Flood Relief Project (Phase 2), Songkhla Province, Royal Irrigation Department				
Item	Contract 1	Contract 2	Contract 3	Contract 4	Project totals
Contract no.	KorJor 40/2558 (Official Publication) dated May 29, 2015	KorJor 20/2559 (Idd.) Dated April 29, 2016	KorJor 19/2559 (Idd.) dated April 29, 2016	KorJor 18/2559 (Idd.) Dated April 29, 2016	
Contract start date	June 4, 2015	May 18, 2016	May 12, 2016	May 18, 2016	
Contract end date	May 18, 2018	May 2, 2019	April 26, 2019	May 2, 2019	
Contract Duration (days)	1,080	1,080	1,080	1,080	
Contract Implementation					
Variation to contract price	0.00	0.00	0.00	0.00	0.00
Escalation of contract price (inflation adjustment of rates)	0.00	0.00	0.00	0.00	0.00
Revised contract price	1,346,000,000.00	859,000,000.00	798,194,699.55	709,000,000.00	3,712,194,699.55
Variation to contract duration	N/A	N/A	N/A	N/A	N/A
Revised contract end date	N/A	N/A	N/A	N/A	N/A
Variation to contract scope	N/A	N/A	N/A	N/A	N/A
Reasons for price changes	N/A	N/A	N/A	N/A	N/A
Reasons for scope and duration changes	N/A	N/A	N/A	N/A	N/A
Total Budget Disbursement	689,738,883.25	269,862,848.21	280,505,027.85	135,811,268.41	1,375,918,027.72
Percentage of Budget Disbursement	51%	31%	35%	19%	37%
Project Progression	Framework 66.7%, physical 46.6 %: delay to plan by 20.1 percent. Due to heavy rain in Southern part during December 2016 to January 2017, canal R1 is used as a drainage canal to prevent flooding of the economic area of Hat Yai district. The contractor was unable to	Framework 16.8% physical 48.2%: faster than plan by 31.4%.	Framework 64.8% physical 36.6%: slower than plan by 28.3 %. Due to heavy rain in Southern part during December 2016 to January 2017, canal R1 is used as a drainage canal to prevent flooding of the economic area of Hat Yai district. The contractor was unable to	Framework 35.39%, physical 13.94%: slower than plan by 21.44%. Due to accumulated delay of work. The contractor is in the process of accelerating the procurement of machinery, tools to keep up with plan.	

Project Name	Hat Yai Flood Relief Project (Phase 2), Songkhla Province, Royal Irrigation Department				
Item	Contract 1	Contract 2	Contract 3	Contract 4	Project totals
	work in that period. The contractor has accelerated the work to keep up with the revised plan.		work in that period. The contractor has accelerated the work to keep up with the revised plan.		
Budget Save	529,366,231.51	375,067,132.26	394,030,017.79	335,996,506.91	1,634,459,888.47
Percentage of Budget Save	28%	30%	33%	32%	30.6%
Revised project cost					
Percentage of revised project cost	0%	0%	0%	0%	0%
Delay in Project Completion (days)	N/A	N/A	N/A	N/A	N/A

Project Name	Construction of runways, taxi ways, apron, etc., Betong Airport, Department of Airports	Demolish and reconstruct the Institute of Dermatology building	Rama III-Dao Khanong-Western outer Bangkok Ring Special Expressway
Item	Single contract	Single contract	Single contract
Contract Procurement			
Procuring entity	Department of Airports	Institute of Dermatology, Department of Medical Services, Ministry of Public Health	Expressway Authority of Thailand (EXAT)
Procuring entity contact details	71 Soi Ngamduplee Rama IV Road, Tungmahamek subdistrict, Sathon District, Bangkok 10120	420/7 Rajavithi Road, Tung Payathai, Rajthevee, Bangkok 10400	2380 Phahon Yothin Road, SenaNikom, Chatuchak, Bangkok 10900
Contract administrative entity	Department of Airports	Institute of Dermatology, Department of Medical Services	Expressway Authority of Thailand (EXAT)
Contract status	In progress	In progress	In process of drafting Term of Reference (TOR)
Procurement process	e-Bidding	e-Bidding	e-Bidding
Contract type	Lump sum	Lump sum	Flexible price (K value)
Number of firms tendering	1	3	N/A
Cost estimate, THB	1,499,992,000	1,060,683,500	29,296,000,000
Contract title	Runway, taxi way, apron and etc. construction project at Betong Airport, Yala Province	Demolish and reconstruct the Institute of Dermatology building. 1 building	N/A
Contract firm(s)	Nawarat Patanakam Public Company Limited	Infinite Engineering and Constructions Co., Ltd.	N/A
Contract price, THB	1,316,732,396.16	947,000,000	N/A
Contract scope of work	Lump sum construction of runway, taxi way, apron, electrical system, internal road, and others facilities, Betong airport, Betong district Yalo province.	Building a new institute of dermatology building replacing old buildings: A 24-storey building, No. 10892 Design and Construction Division, Department of Health Service Support, Ministry of Public Health	N/A
Contract no.	Runway, taxi way, apron and etc. construction project at Betong Airport, Yala Province	Demolish and reconstruct the Institute of Dermatology building contract 1 building dated April 22, 2016	N/A
Contract start date	October 29, 2016	April 22, 2016	N/A
Contract end date	July 15, 2019	October 3, 2019	N/A
Contract Duration (days)	990	1,260	N/A

Project Name	Construction of runways, taxi ways, apron, etc., Betong Airport, Department of Airports	Demolish and reconstruct the Institute of Dermatology building	Rama III-Dao Khanong-Western outer Bangkok Ring Special Expressway
Item	Single contract	Single contract	Single contract
Contract Implementation			
Variation to contract price	0.00	0.00	N/A
Escalation of contract price (inflation adjustment of rates)	0.00	0.00	N/A
Revised contract price	0.00	947,000,000.00	N/A
Variation to contract duration	N/A	N/A	N/A
Revised contract end date	N/A	N/A	N/A
Variation to contract scope	N/A	N/A	N/A
Reasons for price changes	N/A	N/A	N/A
Reasons for scope and duration changes	N/A	N/A	N/A
Total Budget Disbursement	182,378,640.81	98,582,700.00	N/A
Percentage of Budget Disbursement	14%	10%	N/A
Project Progression	In progress 1. Excavation, filling for adjusting level of runway and officer accommodation, and soil compaction of road and runway. 2. Fencing construction area, tie steel rod to reinforced steel post and beam fence. Cement groundwork, and wall masonry. 3. Apron construction: excavation, filling, and compact apron.	In progress of 8-9 payment as follow. Work on 8/62 payment: Job done by 82%. In process of cement for stanchion, cement elevator service wall, and stairs upto third floor. Work on 9/62 payment: Job done by 15%. In process of tower crane installation and hand on security certificate, and related jobs. Process duration from April 22, 2016 to October 2, 2017: 529 days, 731 days remain, overall completion 15.08%	N/A
Budget Save	183,259,603.84	113,683,500.00	N/A
Percentage of Budget Save	12%	11%	N/A
Revised project cost			N/A
Percentage of revised project cost	0%	0%	N/A
Delay in Project Completion (days)	N/A	N/A	N/A

5. Notice of Assurance Team and clarification from the project owner.

5.1 Hat Yai Flood Relief Project (Phase 2), Songkhla Province, Royal Irrigation Department.

1. Notice of Assurance Team and clarification from the project owner.

Purchase of soil from the construction site of renovate the drainage canal R1 with the building. Because of the scope of the four contracts is the same scope of work which specify the contractor must be buyer to amount and price specified in each contract. In the TOR for the contract number 2-4, clearly specify the soil and price of soil but not appear in TOR for Contract 1.

Clarification:

1. For Contract 1: no purchase of soil because it was exceed amount used for construction and not much. According to selling guideline soil from state property must be used for public benefit or public charity. Therefore, the project owner has to coordinate with the relevant agencies to deliver the soil.

2. For Contract 2-4: Due to the large amount of soil from the dredging, soil handling is proceeding in consultation with the excavated soil procedures from state property; according to the Treasury Department's letter No. KroKor 0310/278 dated January 13, 2009. No. 1, determining the condition for the contract winner is the buyer of the soil excavated at the same time without having to sell the auction in accordance with the regulations of the Office of the Prime Minister on the procurement of 1992 and the amendment. And the Department of the Treasury has approved the principle that the Royal Irrigation Department to determine the conditions for the purchase of land excavated in the tender documents of the contractor, according to the Department of the Treasury's most urgent letter no. KroKor 0310/10339 dated September 11, 2008. So it was specified that the contractor must buy all soil and pay to the government.

For the reference price of soil, The Royal Irrigation Department has appointed a set up reference price for soil valuation committee consists of at least 3 persons for appraisal. At least one member must be an expert or knowledgeable about soil valuation. (The Treasury Department staff in the area is a board member.) So the soil valuation is a price that has been considered by the relevant parties.

For the payment of soil, the contractor must pay the government by unit cost and every 30 days report the progress of soil to the Contracting Audit Committee.

2. observations / Concerns in Contract Administration

Delay issues and extend contract period. The lack of construction material and labor cost issue, such as in the first and second contract, may be due to the contractor's liquidity (Table 5) which may be lacking in procurement budgets from other localities, lead to higher cost. So, in considering the contractor. Government agencies should consider the liquidity of the contractor by the contractor to show financial statements in recent years. Take into consideration. To prevent in the event of natural disasters and local materials shortages need to be purchased from other localities.

Table 5: Show current ration = current asset / current liabilities.

Year	Company	Same industry
2015	1.03	1.26
2016	0.95	1.29

Source: Department of Business Development

(1) In case of working period extension without additional budget i.e. stop working due to flood, so the construction budget still the same.

(2) Contract price of Hat Yai Flood Relief Project (Phase 2), Songkhla Province lower than reference price because the contract is signed in unit price and dividing 1 project into 4

projects cause each project budget reduce. This may result that construction contractors are more interested in the project. Therefore, the tender price is lower than reference price.

(3) No reason for change in contract price.

(4) While contract 1 is slower than scheduled, the budget is unchanged. But contract 2 is faster than schedule, there is an escalation in contract price.

(5) As these contracts are unit price contract, there are excess work than contracted in some contracts. The Royal Irrigation Department has requested the transfer of money and has not been approved budget, so it cannot be disbursed to the contractor. These may cause work delays. The government sector should resolve, if the project is implemented in type of unit price contract, by providing budget more than installment payment. So can disburse to contractor for further work belong to next installment.

3. Observations / Concerns on Environmental Impact

Observation on Hat Yai Flood Relief Project (Phase 2), Songkhla Province, Royal Irrigation Department, Ministry of Agriculture and Cooperatives found that there is no EIA report disclosed. Only disclose information on public relation, mass relations, and participation of people in the area. People outside the project area do not know about the project which may cause complaints during construction.

From on field of Assurance Team, summary from interviewing people around the project as

Positive impact	Negative impact
Flood relief. Have road along the canal Develop route along the canal for tourism purpose	Even if no flood in Hat Yai, but in some areas still flood. Ecosystem is destroyed. The existing nature was lost. The extinction fish found. During construction; the road collapse, risk of accidents in the community, severe dust, and vibration.

4. Suggestion and solution from on field

From on field of Assurance Team found that people around the project area would like project participants more involved in problem solving continuously by assessing the impact of construction and up-to-date addressing the problem because the construction area is a community area, such as the way to allow villagers to use water in the canal to benefit. Increase publicity in each phase to provide more information to the community.

5.2 Runway and taxi way construction project at Betong Airport, Yala Province, Department of Airports.

1. Notice of Assurance Team and clarification from the project owner.

Number of firms tendering only 1 firm.

1) No disclosure of firm tendering.

2) In case of 1 firm tendering, is there a re-invitation/extend tendering? There should show the detail of extend tendering. In case of no re-invitation/extend tendering. There should be a reason why choose only 1 firm tendering.

Clarification:

1. 27 firms buy tendering document but only 1 tender. This make only 1 firm shown in disclosure.

2. The auction evaluation committee collected the details of this auction including the reason for the selection if the contract must be signed with the winner, because only one candidate, and the Department of Airport send information and reasons for accelerating the

implementation of the project to the Ministry of Transport. To forward to Cabinet agreed to sign employment contract which has been considered to approve in hiring a single bidder.

2.1 Betong Airport Construction Project is a developing a regional airport that will make the air transportation network more efficient. (4 years Yala Development Plan (2014-2060), Strategic Issues for Development of Natural and Cultural Tourism Sites)The project is to support the ASEAN community, to support for tourism, economic development, social and facilitating people. And also to solve the problem of security and unrest in the southern border provinces, supported military units operating in the southern border provinces which comply with government policy and special area development strategies in the five southern border provinces.

2.2 Government agencies must accelerate the procurement / hiring and debt obligations to be completed within a specified time frame strictly in accordance with the measures and guidelines for expediting. Keep track of annual budget spending plans.

2.3 If the auction is canceled, the second auction will require a delay of 60 working days, which may result in the impossibility of spending the approved budget.

2.4 The price the company offers is reasonable. It is lower than the reference price and is within the budget, which is beneficial to the government and is the accurate bidding that meet the tender specifications of the Department of Airport.

2.5 Agreed to hire Nawarat Patanakarn Public Company Limited to be the construction contractor for the runway in budget of 1,316,732,396.16 Baht completed within 990 days. And there was a negotiation to lower prices, the company had issued the letter to confirm bid price.

2. Observations / Concerns in Contract Administration

(2.1) As of August 2017, the project concluded that accumulate framework as 9.288 and accumulate working as 21.048, faster than schedule by 0.76%. But conflict with budget disbursement which remain 58.90%. It is not certain whether paid budget in fiscal year 2017 in each installment includes advance payment. It works faster than schedule but why the payment delayed or delay in withdrawal.

(2.2) The project has been approved for budget since October 8, 2016 (Fiscal year 2017), but the Department of Airports has contracted on October 29, 2016 (fiscal year 2017), which takes about a year to sign the contractor.

3. Observations / Concerns on Environmental Impact

On field of Assurance Team, the summary from interview with people around project area as

Positive impact	Negative impact
More route and air traffic.	Impact of construction: There are road closures and redirects to the route, where the construction project plans to cut a new line to allow residents in the area to roam but no progress. Dust in construction site. There is a change in the delivery route of water supply to the area of Moo 8, Yaram district, which may cause inadequate water consumption in the area as well as electricity used to direct the way and illuminate the construction projects and nearby points at night, there are quite a few.
	Lifestyle impact: The way people live in some area has changed because some landowners had traditional occupations as farmers. When there is no area for farming, it must be changed to a mercenary career which may affect the children, impact on the economical occupation, and income of people in the area.
	Environmental effect: It was found that the amount of waste was increased by the population entering and leaving the area. Sound pollution of airplanes when the airport is open. These may directly affect people living in the vicinity of the airport. Another aspect of the plane's sound may affect animals such as hornbills that live in forest areas close to the Betong area.

4. Suggestion and solution from on field

Should provide the opportunity to work toward in-area people before outside area people by considering people who directly affected by the project. Conduct understanding, public relations, and publicize construction project at all operation stages as well as prepare for society organization. In addition, the development of the Betong area is to be preserved along with the conservation of cultural areas and traditional way of life. Develop a Joint policy and strategy planning between project and community.

5.3 Demolish and reconstruct the Institute of Dermatology building, Department of Medical service, Ministry of Public Health.

1. Notice of Assurance Team and clarification from the project owner.

By monitoring the disclosure of progress reports according to the project plan, delays were found throughout the implementation of the plan. From the beginning of the project to the present, how does the agency have to supervise and be able to carry out the contract period?

Clarification:

The main problem that causes delays due to limited space makes site management more complex. And the new pile cannot be done because the old pile found in the ground must be pulled out first. This requires more work time. Therefore, the project owner is responsible for overseeing the operation of the project and the contractor by arranging a weekly meeting to review the problems and obstacles that delay and solve the problem promptly.

2. Observations / Concerns in Contract Administration

The delay of demolish and reconstruct the Institute of Dermatology building due to old piles of old building. Time to remove old piles and pouring concrete for piling new building should be reset to be longer than others operational periods.

3. Observations / Concerns on Environmental Impact

Demolish and reconstruct the Institute of Dermatology building, Department of Medical service, Ministry of Public Health is only one project that does not conduct EIA report according to the Notification of the Ministry of Natural Resources and Environment dated June 20, 2012, the Government Gazette, page 7, Article 29. These may cause the project does not have public relations or publicize information to general public. This may cause misunderstanding or suspicion whether the project was conduct EIA report, required by law, or not.

On field of Assurance Team, the summary from interview with people around project area as

Positive impact	Negative impact
To develop a better and more modern medical center and serve the patients in a standardized manner. New construction will benefit the development of public health services.	Construction impact: vibration, noise and dust may affect patients/customers due to there are several public health services in area and their sanitation system are connected. There may be concerns about the physical changes surrounding it.

4. Suggestion and solution from on field

Demolish and reconstruct the Institute of Dermatology building: Propose to have "Construction Management Operations Center" that is easy to receive complaints, service, deal with problems promptly. And also continuously monitor on social and environment impacts.

5.3 Rama III-Dao Khanong-Western outer Bangkok Ring Special Expressway, Expressway Authority of Thailand.

1. Notice of Assurance Team and clarification from the project owner.

Impact on the land expropriation. With detailed design, 74 plots of land being expropriated were estimated, with an area of 6 rai 1 ngan 9.1 square wah (2,509.1 square wah) and 78 edifices. No disclosure on impact on land expropriation.

Clarification:

The Royal Decree defines area of land to be expropriated (details of current property ownership) is under consideration by the Office of the Council of State, so the information has not been formally approved. The disclosure of information as required by the CoST will confuse the public. Therefore, the project owner's agency requests that the disclosure in each phase should be done after each operational phase is official approved

There is no further concern for disclosure of information due to the project's early stage. On field of Assurance Team, the summary from interview with people around project area as

Positive impact	Negative impact
Enhance the efficiency of the transportation system.	It may affect the traffic of people in the access area, the traffic may be closed, the traffic in the area becomes more congested and the risk of accidents will cause damage to the physical and environmental conditions as well as pollution including dust from construction

2. Suggestion and solution from on field

Propose to disseminate information to public and community at all stage. Set up "In-area project management center" to handle problems and reduce the risk of construction. And also have a staff to handle those complaints. Develop a joint working plan between the project and the network partner in the area of the project to reduce the risk and solve construction problems, as well as to have a participatory monitoring and evaluation system.

6. Suggestion about item in proactive disclosure

Assurance Team proposed to add one more disclosure item, "Complaint Management", as item 40. In order to know how project handle complaint and what action to solve the complaint, to use with assurance team when on field to see people, to check whether the project owner had taken action to resolve the complaint as disclosed, and to consider as social responsibility of project owner.

ADDENDUM

Hat Yai Flood Relief Project (Phase 2), Songkhla Province, Royal Irrigation Department

1. Background: is a project to solve and mitigate the flood in Hat Yai and nearby area according to His Majesty King Bhumipol Adulyadej's royal words. Since 1988, the flood in Hat Yai municipality damaged the houses, lives and property of people in Hat Yai municipality and nearby economic area valued about 4,000 million Baht. His Majesty King Bhumibol Adulyadej gave royal words to Mr. Jira Yutthayanon, Director-General of the Royal Irrigation Department, Mr. Sumate Tantivejkul, Director of the Office of the Royal Development Projects Board and related officials for consideration and resolution of the flood in Hat Yai District, Songkhla Province. His Majesty said that "Build large reservoirs at U-Tapao canal and along the tributaries to solve and mitigate the flood in order to block large amounts of water from flowing into Hat Yai City, it would not be possible. There are no suitable locations for the construction of such large reservoirs. Thus, the large drainage canal which divide the water from U-Tapao canal or to get water overflowing Hat Yai and fast drain into Songkhla Lake should be considered. In order to completely prevent flood to community area and business area, after finish construct drainage canal, in addition, dikes around the area together with pumping system for take water out of unwanted flood area as need. Consider together with the system in city plan to be consistent and join benefit." In 1989, the Royal Irrigation Department dredged 4 natural canals totaling 46,900 km, namely U Tapao Cana, U-Tapao Canal branch 1, U-Taphao branch 2, and Tha Chang - Bang Klam Canal.

In year 2000, there is a flood in Hat Yai district, Songkhla province again and His Majesty the King allowed a group of people had an audience with royalty and gave the words about flood in2 Hat Yai district, Songkhla province at Chitralada Garden Residence: "On 22-23 November 2000 floods in the south, especially in Hat Yai, damaged billions of baht. If you have made the plan since 1988, the investment will be returned many times. "

The Cabinet has resolved on December 19, 2000 that the Royal Irrigation Department shall proceed with the flood rehabilitation project in the Hat Yai district. The Royal Irrigation Department has carried out 7 dredging canals with a total budget of 4,700 million baht, with a total capacity of 1,075 cubic meters per second.

In 2010, the flooding of down town Hat Yai, the amount of water flowing through 1,623.50 cubic meters per second, exceeded the potential of the existing drainage canals, resulting in overflow from the U-Tapao Canal and the drainage canal. R.1, flooded the area of Hat Yai municipality and nearby. It takes about 2 days to drain the water into normal, damage about 10,490 million baht. To solve the problem, the Royal Irrigation Department has considered to improve the drainage of drainage canal. R.1 and associated buildings can accommodate the water content. On 13 January 2012, the Royal Irrigation Department approved the implementation of flood relief project in Hat Yai (Phase 2), Songkhla province.

2. Objective: To improve the drainage capacity of drainage canal R1 from 465 cubic meters per second to 1,200 cubic meters per second, to drain faster.

3. Location: Start location is on Moo1 Ban Na Kuan, Kuanlang municipality, Hat Yai district, Songkhla province.

4. Project feature: The project consists of the improvement of the drainage canal R.1, the construction of the floodgate of the Na Kuan 2, the construction of the floodgate of Bang Yee 2 and construction of pumping station at the end of Klong Rua 1 (lakeside)

5. Construction Cost: 6,500.00 Million Baht (Including Land)

6. Project Duration: 4 years (2015-2018)

More information at www.cgd.go.th/cs/internet/internet/CoST.html

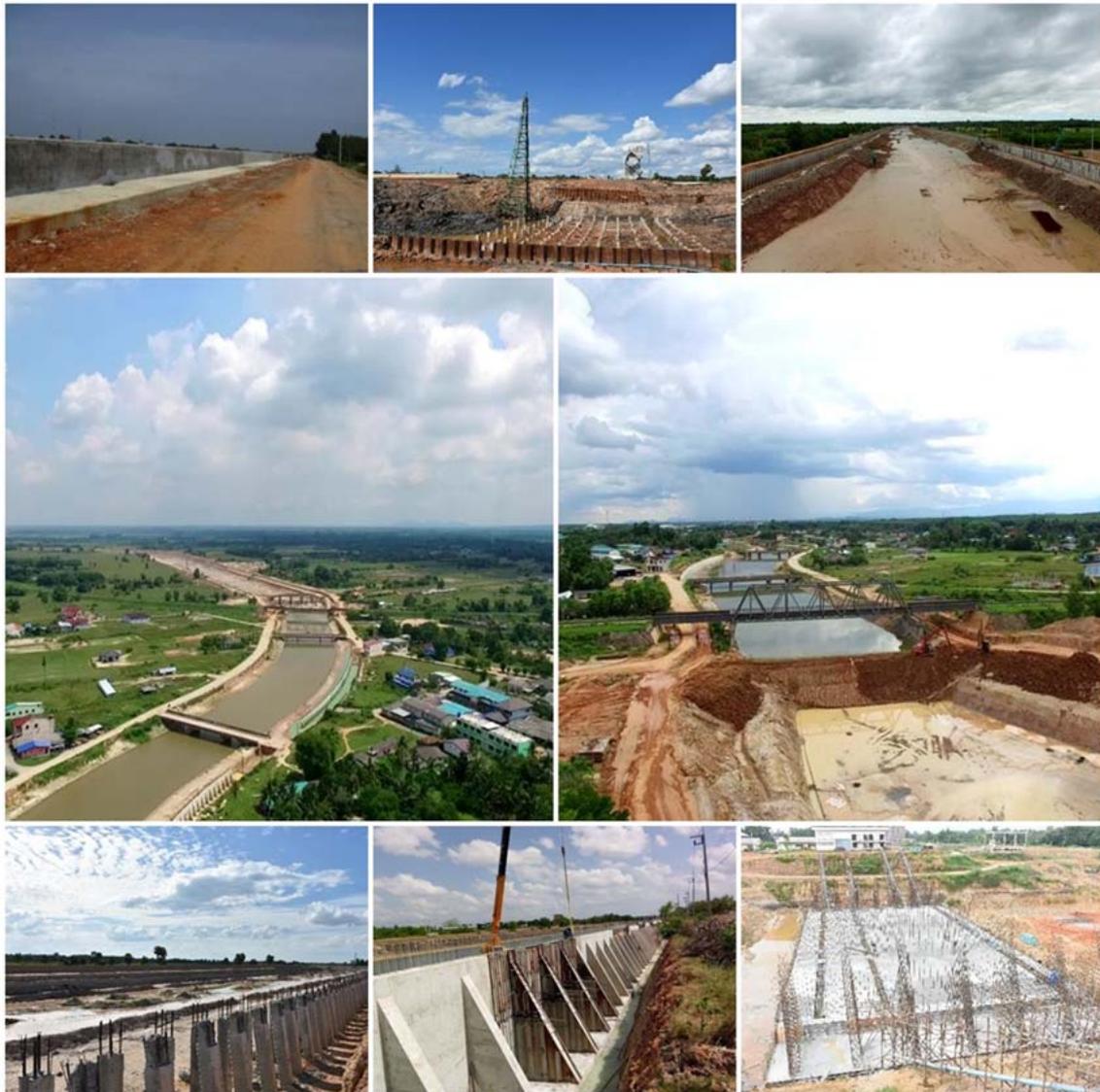


Figure 10: Progress on the construction of the flood relief project at Hat Yai (Phase 2), Songkhla province, Royal Irrigation Department

7. Assurance report

Operational phase	List	Inspection result on information disclosed
Project identification and presentation	1. Project owner	Large Irrigation Construction Office 11, Bureau of Large Scale Water Resources Development, Royal Irrigation Department
	2. Sector, subsector	Prevention and mitigation of water harm by mission
	3. Project name	Hatyai Flood Relief Project (Phase 2), Songkhla Province
	4. Project Location	Moo 1 Ban Kuan, Khon Kaen Municipality, Hat Yai District, Songkhla province or at 47 N 611-723 L7018 scale map 1: 50,000 number 5022 and 5023.
	5. Purpose	<ol style="list-style-type: none"> To improve the drainage capacity of drainage canal R1 from 465 cubic meters per second to be 1,200 cubic meters per second, combined with drainage of the U-Tapao Canal, which can drain water 465 cubic meters per second, totaling 1,665 cubic meters per second Increased water storage for agricultural 5 million cubic meters.
	6. Project description	<p>Consist of 4 main tasks</p> <ol style="list-style-type: none"> Renovation of drainage canal R.1: Lenght 20.937 km. Increase drainage from 465 cubic meters per second, to be not least than 1,200 cubic meters per second. There are 3 ranges of canal <ol style="list-style-type: none"> R1 drainage canal range km1+000 to km3+813: improve old soil canal by excavate canal bed to expand from 50 meter to 100 meter. R1 drainage canal range km3+953 to km14+460: improve old soil canal to be reinforced concrete canal by pile and put concrete wall for bank protection. R1 drainage canal range km14+460 to km20+937: renovate reinforced concrete canal by adding reinforced concrete wall. Construction of the Na Kuan 2 floodgates: in order to drain in accordance with the renovation of drainage canal R1. Construction of the Bang Yi 2 floodgates: in order to drain in accordance with the renovation of drainage canal R1. Construction of a pumping station at the end of Canal 1 (Lake): at pumping rate of 90 cubic meters per second to improve the efficiency of drainage of the canal R1 to Songkhla Lake faster.
Project preparation	7. Expected outcome	Improved drainage of drainage canal R1 from 465 cubic meters per second to be 1,200 cubic meters per second so drain into Songkhla Lake faster.
	8. Environmental impact	<p>EIA report was not conduct. AT found only summary report¹ of public relations, mass relations, and public participations which consist of</p> <ol style="list-style-type: none"> The follow up meeting of the study and set up team for the Hat Yai flood relief project in the area of Klong U-Taphao watershed. 4 reports of subgroup meeting with local government representative, beneficiaries as well as people affected by the project. <p>Summary: Participants have a good understanding of the project, agree on the project, and ready to participate In all aspects. By offering a public relations model, they need to promote the project periodically through community leaders.</p>
	9. Land and settlement impact	<p>Land ownership: Construction of the flood relief project in Hat Yai District (Phase 2)</p> <ol style="list-style-type: none"> Mainly constructed in the old irrigation area. Some of which are required to be constructed outside of the existing irrigation area. Expand the irrigation area is required and looking for additional land about 98 rai such as <ol style="list-style-type: none"> In Bang Rieng subdistrict, Kuan Niang District about 76 rai In the area of Bang Klam district, about 13 rai. In the area of Khuan Lang subdistrict and Hat Yai subdistrict, Hat Yai district, about 9 rai.

¹ Reference:

[http://irrigation.rid.go.th/rid16/sip/songkhaproject/%E0%B8%A3%E0%B8%B2%E0%B8%A2%E0%B8%87%E0%B8%B2%E0%B8%99%E0%B9%82%E0%B8%84%E0%B8%A3%E0%B8%87%E0%B8%81%E0%B8%B2%E0%B8%A3%E0%B8%9A%E0%B8%A3%E0%B8%A3%E0%B9%80%E0%B8%97%E0%B8%B2%E0%B8%AD%E0%B8%B8%E0%B8%97%E0%B8%81%E0%B8%A0%E0%B8%B1%E0%B8%A2%E0%B8%AB%E0%B8%B2%E0%B8%94%E0%B9%83%E0%B8%AB%E0%B8%8D%E0%B9%88%20%E0%B8%82%E0%B8%AD%E0%B8%95%E0%B8%B1%E0%B9%89%E0%B8%87%202557\).pdf](http://irrigation.rid.go.th/rid16/sip/songkhaproject/%E0%B8%A3%E0%B8%B2%E0%B8%A2%E0%B8%87%E0%B8%B2%E0%B8%99%E0%B9%82%E0%B8%84%E0%B8%A3%E0%B8%87%E0%B8%81%E0%B8%B2%E0%B8%A3%E0%B8%9A%E0%B8%A3%E0%B8%A3%E0%B9%80%E0%B8%97%E0%B8%B2%E0%B8%AD%E0%B8%B8%E0%B8%97%E0%B8%81%E0%B8%A0%E0%B8%B1%E0%B8%A2%E0%B8%AB%E0%B8%B2%E0%B8%94%E0%B9%83%E0%B8%AB%E0%B8%8D%E0%B9%88%20%E0%B8%82%E0%B8%AD%E0%B8%95%E0%B8%B1%E0%B9%89%E0%B8%87%202557).pdf)

Operational phase	List	Inspection result on information disclosed
		<p>Land, especially in Hat Yai district, which is located in the agricultural market of Hat Yai municipality. Hat Yai municipality has no objections to the permission of the area but pay for land and buildings. Government has announced a Royal Decree prescribing the area of land to be expropriated in Bang Rieng Sub-district, Kuan Niang District, Bang Klam District, Bang Klam District and Khon Lal District, Hat Yai District, Hat Yai District, Songkhla Province, 2559, dated 4 March 2016.</p> <p>Impact: Affected Bang Reang villagers have complain to the Center for Justice and the media, asking for fairness on the value of land expropriation. The Pricing Committee and the Harmonize Committee Conducted a meeting with all stakeholders until a resolution on expropriation was reached. The Royal Irrigation Department, by resolution of the above board, will continue to operate for the remaining plots of land.</p>
	10. Details for contacting the staff and the project owner.	<ol style="list-style-type: none"> 1. Mr. Chayan Muang Song Director of Bureau of Large Scale Water Resources Development Tel 02-243-6901 ext.2345 Fax: 02-669-5027 2. Mr. Sermchai Suebsat Director of Large Irrigation Construction Office No. 11 Bureau of Large Scale Water Resources Development, Royal Irrigation Department Tel: 074-598-463 ext 109-10. Fax: 074-556-357.
	11. Funding sources	Government Budget: Annual government statement of expenditure for 2015 - 2016
	12. Project Budget	6,500,000,000 baht
	13. Project budget approval date	January 13, 2012
Procurement	14. Procuring entity	Royal Irrigation Department
	15. Procuring entity contact details	Royal Irrigation Department. 811 Samsen Road, Nakhon Ratchasima sub district, Dusit district, Bangkok 10300
	16. Terms of reference (TOR)	<p>Hatyai flood relief project (Phase 2) Songkhla province is divided into 4 contracts.</p> <ol style="list-style-type: none"> 1. First contract: Construction work to improve drainage canal R1 with building. (km3+813 to km7+400) 2. Contract 2 : Construction work to improve drainage canal R1 with building. (km7+400 to km11+600) 3. Contract 3 : Construction work to improve drainage canal R1 with building. (km11+600 to km16+700) 4. Contract 3 : Construction work to improve drainage canal R1 with building. (km16+700 to km21+319) <p>Scope of work (TOR) of 4 contracts consists of.</p> <ol style="list-style-type: none"> 1. Background 2. Objectives 3. Bidder qualification. 4. Construction safety management system. 5. The capacity and availability available on the bidder's bid date. <ol style="list-style-type: none"> 5.1. Personnel 5.2. Machinery - Factory Tools 5.3. Financial status 6. Drawing in details <ol style="list-style-type: none"> 6.1. Construction specific conditions 7. Important items to be prepared by the contractor. 8. List of constructions on each contract. 9. Signs shown details of construction. 10. Supply of vehicles for construction control. 11. Computer supply and peripherals. 12. Construction of a temporary office building to control the construction of employer. 13. Tools for testing survey tools and equipment. 14. Equipment for communication and coordination between the employer, the inspection committee and the contractor. 15. Provide additional shop drawings and as-built drawings.

Operational phase	List	Inspection result on information disclosed
		16. The important item that the contractor does not have to prepare 17. Criteria for hiring skill workers and control engineers. 18. Delivery of works. 19. Operation. 20. Performance check and inspection. 21. Employment contract form. 22. Payment. 23. Prepaid payment. 24. Engineering details. 25. Working timeframe. 26. Delivery period. 27. Procurement budget. 28. Contact information. 29. Table of budget allocation and cost estimate in construction work.
	17. Procurement process	Contract 1: Use electronic bidding method (E-Auction). Contract 2-4: Use electronic bidding method (E-Bidding). Note: Procurement according to the Office of the Prime Minister on Electronic Procurement, 2006, which requires government agencies with procurement projects with a value of 2 million or more. To use electronic bidding.
	18. Contract type	For contract 1-4: use construction contract in unit price format.
	19. Contract status (current)	The current status of contracts 1-4 in the procurement process is the status of the contract, which indicates that the status of the contract, has been concluded with the contract..
	20. Number of firms tendering	Contract 1: 16 firms. Contract 2 : 4 firms. Contract 3 : 4 firms. Contract 4 : 4 firms.
	21. Cost estimate	Contract 1: Baht 1,875,366,231.51 Contract 2: Baht 1,234,067,132.26 Contract 3: Baht 1,192,224,717.34 Contract 4: Baht 1,044,996,506.91 All amounts Baht: 5,346,654,588.02
	22. Contract administration entity	Large Irrigation Construction Office No. 11 Bureau of Large Scale Water Resources Development, Royal Irrigation Department
	23. Contract title	The flood relief project, Hat Yai district (Phase 2) Song khla province 1. Contract 1: Renovate of drainage canal R1 with buildings. (km3 + 8.13 to km7 + 400) Contract No. KorJor 40/2558 (Official Publication) dated May 29, 2015 2. Contract 2: Renovate of drainage canal R1 with buildings. (Km 7 + 400 to km 11 + 600) Contract No. KorJor. 20/2559 (Idd.) Dated April 29, 2016 3. Contract 3: Renovate of drainage canal R1 with buildings. (km11 + 600 to km16 + 700) Contract No. KorJor 19/2559 (Idd), dated April 29, 2016 4. Contract 4: Renovate of drainage canal R1 with buildings. (Km 16 + 700 to km 21 + 319) Contract No. KorJor 18/2559 (Idd.) Dated April 29, 2016.
	24. Contract firm(s)	Contract 1-2: Siamphan Enterprise Plc. Contract 3: Peimpoon Engineering Co., Ltd. Contract 4: Chai Charoen Maitree Co., Ltd.
	25. Contract price	Total value of 4 contracts: Baht 3,712,194,699.55 as follows: Contract 1: Baht 1,346,000,000.00 Contract 2: Baht 859,000,000.00 Contract 3: Baht 798,194,699.55 Contract 4: Baht 709,000,000.00 Note: save the budget by all Baht 1,634,459,888.47 as 30.57 percent of the reference price.

Operational phase	List	Inspection result on information disclosed
	<p>26. Contract scope of work</p> <p>27. Contract start date and duration</p>	<p>Contract 1: Contains</p> <ol style="list-style-type: none"> 1. Renovation of canal R1 km 3 + 953 to km 7 + 400 2. Bang Yi 2 Floodgate 3. Bang Yi Pumping Station Work 4. Renovation of 5 bridges 5. Renovation of 19 irrigation buildings <p>Contract 2: Contains</p> <ol style="list-style-type: none"> 1. Renovation of canal R1 km 7 + 400 to km 11 + 600 2. Tha Chang - Bang Klam floodgate 3. Drainage pipe work Tha Chang 4. Renovation of 4 bridges 5. Renovation of 22 water intake buildings <p>Contract 3: Contains</p> <ol style="list-style-type: none"> 1. Renovation of canal R1 km 11 + 600 to km 16 + 700 2. Drainage pipe work Khok Mao 4 jobs 3. Renovation of 8 bridges 4. Renovation of 26 water intake buildings <p>Contract 4: Contains</p> <ol style="list-style-type: none"> 1. Renovation of canal R1 km 16 + 700 - km 20 + 937 2. Na Kuan 2 floodgate. 3. Drainage pipe work Klong Tam 4. Drainage pipe work Klong Ward 5. Renovation of 12 bridges 6. Renovation of 31 water intake buildings <p>1. Contract 1: 1,080-day contract Commencement of contract: June 4, 2015 End of contract: May 18, 2011.</p> <p>2. Contract 2: Contract period is 1,080 days. Commencement of the contract: May 18, 2019 Contract term: May 2, 2019</p> <p>3. Contract 3: Contract period is 1,080 days. Commencement of the contract: May 12, 2019 Contract term: April 26, 2019</p> <p>4. Contract 4: Contract Duration 1,080 days Commencement of the contract: May 18, 2019 Contract term: May 2, 2019</p>
Implementation	28. Variation to contract price	<p>1. Contract 1: No variation to contracts price.</p> <p>2. Contract 2:</p> <p>Contract amount: 859,000,000 Baht Contract period: 1,080 days (commenced on May 18, 2016) End of contract: May 2, 2019 Fiscal year 2017: 20,281,900.00 Baht Disbursement: 20,281,900.00 Baht (100%)</p> <p>Note :</p> <ol style="list-style-type: none"> 1. To Budget Bureau: request for transfer of change of work for the 1st installment amount of 44,205,900.32 baht 2. To Budget Bureau: request for transfer of change of work for the second installment amount of 51,062,264.00 Baht 3. To Ministry of Agriculture and Cooperatives: request for transfer of change of work for the third installment amount of 77,847,205.71 Baht 4. Submitted to Ministry of Agriculture and Cooperatives: request for transfer of change of work for the fourth installment amount of 44,112,300.00 Baht 5. Total amount 217,227,670.03 Baht <p>3. Contract 3:</p> <p>Contract amount: 798,194,699.55 Baht Contract period: 1,080 days (commenced on 12 May 2016) End of contract: April 26, 2019 Fiscal year 2017: Budget 18,846,200.00 baht Disbursement: 86,653,363.30 Baht (100%)</p>

Operational phase	List	Inspection result on information disclosed
		<p>Note :</p> <ol style="list-style-type: none"> 1. Paid: request for transfer of change of work for the third installment amount of 28,520,796.30 Baht 2. Paid: request for transfer of change of work for the 4th installment amount of 39,286,367.00 baht 3. To budget bureau request for transfer of change of work for the 5th installment amounting to 5,029,867.00 baht 4. To Ministry of Agriculture and Cooperatives: request for transfer of change of work for the sixth amount of 27,257,143.54 baht <p>4. Contract 4:</p> <p>Contract amount: 709,000,000 Baht Contract period: 1,080 days (commenced on May 18, 2016) End of contract: May 2, 2019 Fiscal year aside 2016: 16,771,374.00 Baht Disbursement: 13,324,793.91 Baht (79.45%) Fiscal year 2017: 16,740,200.00 baht Disbursement: 16,740,200.00 (100%)</p> <p>Note :</p> <ol style="list-style-type: none"> 1. request for transfer of change of work for the fourth installment amount of 1,055,740.00 Baht 2. request for transfer of change of work for the 5th installment amount of 4,355,914.00 Baht
	29. Escalation of contract price	<ol style="list-style-type: none"> 1. Contract 1: No escalation of contract price. 2. Contract 2: change of work 1st – 4th in amount of 217,227,670.03 baht 3. Contract3: change of work 3rd – 6th in amount of 100,094,173.84 baht 4. Contract 4: change of work 4th – 5th in amount of 5,411,654 baht <p>Notice :</p> <ol style="list-style-type: none"> 1. There has been a change in the contract for each period, but it does not affect the entire contract because it is a unit price contract that can change the cost. 2. It may be possible to switch the workload of each task.
	30. Variation to contract duration	<p>Contract 1:</p> <p>Original timeline: June 4, 2015 – May 18, 2011. Contract period: 1,080 days New timeline: June 4, 2015 – September 15, 2018. Contract period: 1,200 days</p> <p>Contract 2:</p> <p>Original timeline: May 18, 2016 – May 2, 2019. Contract period: 1,080 days New timeline: May 18, 2016 – August 30, 2019. Contract period: 1,200 days</p> <p>Contract 3:</p> <p>Original timeline: May 12, 2016 – April 26, 2019. Contract period: 1,080 days New timeline: May 12, 2016 – September 4, 2019. Contract period: 1,200 days</p> <p>Contract 4:</p> <p>Original timeline: May 18, 2016 – May 2, 2019. Contract period: 1,080 days New timeline: May 18, 2016 – August 30, 2019. Contract period: 1,200 days</p>
	31. Variation to contract scope	<p>No variation to contract scope in all 4 contract. (There are some delayed and faster than scheduled but not affect the contract scope) Reason: Natural disaster</p>
	32. Reasons for price changes	No action.
	33. Reasons for scope and duration changes	<p>No variation to contract scope except duration due to the impact of flood. The contractor cannot continue construction, labor and construction material shortage, Factories cannot produce raw materials. Transport and routes connected to the affected area cannot be transported to the construction site for labor and raw materials.</p>

Operational phase	List	Inspection result on information disclosed										
Project Completion	34. Project status	<p>During implementation along the contract which consider in 2 parts</p> <p>(1) Percentage disbursement of the project according to the fiscal year and budget for the entire project.</p> <p>(2) Progress report (Monthly Report)</p> <p>Contract 1: Renovate of drainage canal R1 with buildings. (km3 + 8.13 to km7 + 400) Contract period: 1,200 days (Commenced on June 4, 2015 End of contract on September 15,2018</p> <p>1. Percentage disbursement of the project according to the fiscal year and budget for the entire project.</p> <p>Budget disbursement</p> <table border="1" data-bbox="692 607 1401 871"> <tr> <td>Fiscal year 2015</td> <td>Allocate amount 202,351,061.00 baht Disburse amount 202,351,061.00 baht (100%)</td> </tr> <tr> <td>Fiscal year 2016</td> <td>Allocate amount 305,704,871.00 baht Disburse amount 305,704,871.00 baht (100%)</td> </tr> <tr> <td>Fiscal year 2017</td> <td>Allocate amount 190,683,000.00 baht Disburse amount 190,683,000.00 baht (100%)</td> </tr> <tr> <td>Total budget</td> <td>Allocate amount 698,738,932.00 baht</td> </tr> <tr> <td>Total disbursement</td> <td>Disburse amount 698,738,932.00 baht (100%)</td> </tr> </table> <p>2. Progress report (Monthly report)</p> <p>During the construction of the canal, R 1 km 3 + 953- km 7 + 400 and Bang Yi 2 pumping station.</p> <p>Framework 66.66 percent, working 46.5691 percent. Slower than plan by 20.0909 percent due to heavy rain in Southern part during December 2016 to January 2017. The drainage canal R1 is used as a drainage canal to prevent flooding of the economic area of Hat Yai district. The contractor cannot complete the construction. The contractor has accelerated the work to keep up with the plan.</p> <p>Things to disclose</p> <p>(1) S-Curve graph: Report is similar to S-Curve graph as text. The plan is 66.66 percent, 46.57 percent, but should be presented as a graph. It's easy to follow.</p> <p>(2) Delays in construction projects: slower than planned 20.09%</p> <p>(3) Photo of project progress (Not shown in progress report)</p> <p>(4) Report problems and obstacles in operation together with solutions. Report problems and obstacles on the weather and resolve by accelerating the contractor to keep up working with the plan.</p> <p>(5) Accident Report and Prevention Guidelines (Not shown in progress report)</p>	Fiscal year 2015	Allocate amount 202,351,061.00 baht Disburse amount 202,351,061.00 baht (100%)	Fiscal year 2016	Allocate amount 305,704,871.00 baht Disburse amount 305,704,871.00 baht (100%)	Fiscal year 2017	Allocate amount 190,683,000.00 baht Disburse amount 190,683,000.00 baht (100%)	Total budget	Allocate amount 698,738,932.00 baht	Total disbursement	Disburse amount 698,738,932.00 baht (100%)
Fiscal year 2015	Allocate amount 202,351,061.00 baht Disburse amount 202,351,061.00 baht (100%)											
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Fiscal year 2017	Allocate amount 190,683,000.00 baht Disburse amount 190,683,000.00 baht (100%)											
Total budget	Allocate amount 698,738,932.00 baht											
Total disbursement	Disburse amount 698,738,932.00 baht (100%)											
		<p>Contract 2: Renovate of drainage canal R1 with buildings. (km7 + 400 to km11 + 600) Contract period: 1,200 days (Commenced on May 18, 2016 End of contract on August 30, 2019)</p> <p>1. Percentage disbursement of the project according to the fiscal year and budget for the entire project.</p> <p>Budget disbursement</p> <table border="1" data-bbox="692 1630 1401 1895"> <tr> <td>Fiscal year 2016</td> <td>Allocate amount 154,312,785.00 baht Disburse amount 154,312,785.00 baht (100%)</td> </tr> <tr> <td>Fiscal year aside 2016</td> <td>Allocate amount 25,462,785 baht Disburse amount 25,462,785.00 baht (100%)</td> </tr> <tr> <td>Fiscal year 2017</td> <td>Allocate amount 115,550,064.00 baht Disburse amount 115,550,063.21 baht (99.99%)</td> </tr> <tr> <td>Total budget</td> <td>Allocate amount 269,862,849.00 baht</td> </tr> <tr> <td>Total disbursement</td> <td>Disburse amount 269,862,848.21 baht (99.99%)</td> </tr> </table> <p>2. Progress report (Monthly report)</p> <p>During the construction of the canal, R 1 range km7 +400 – km11+600 with building Framework 16.8491% working 48.2497%. Faster than plan by 31.4006%</p>	Fiscal year 2016	Allocate amount 154,312,785.00 baht Disburse amount 154,312,785.00 baht (100%)	Fiscal year aside 2016	Allocate amount 25,462,785 baht Disburse amount 25,462,785.00 baht (100%)	Fiscal year 2017	Allocate amount 115,550,064.00 baht Disburse amount 115,550,063.21 baht (99.99%)	Total budget	Allocate amount 269,862,849.00 baht	Total disbursement	Disburse amount 269,862,848.21 baht (99.99%)
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Fiscal year aside 2016	Allocate amount 25,462,785 baht Disburse amount 25,462,785.00 baht (100%)											
Fiscal year 2017	Allocate amount 115,550,064.00 baht Disburse amount 115,550,063.21 baht (99.99%)											
Total budget	Allocate amount 269,862,849.00 baht											
Total disbursement	Disburse amount 269,862,848.21 baht (99.99%)											

Operational phase	List	Inspection result on information disclosed						
		<p><u>Things to disclose</u></p> <p>2.1 S-Curve graph: Report is similar to S-Curve graph as text. The plan is 6.85% working 48.25%, but should be presented as a graph. It's easy to follow.</p> <p>2.2 Delays in construction projects: faster than planned 31.40%</p> <p>2.3 Photo of project progress (Not shown in progress report)</p> <p>2.4 Report problems and obstacles in operation together with solutions. (Not shown in progress report)</p> <p>2.5 Accident Report and Prevention Guidelines (Not shown in progress report)</p>						
		<p>Contract 3: Renovate of drainage canal R1 with buildings. (km11 + 600 to km16 + 700) Contract period: 1,200 days (Commenced on May 12, 2016 End of contract on September 4, 2019)</p> <p>1. Percentage disbursement of the project according to the fiscal year and budget for the entire project.</p> <p>Budget disbursement</p> <table border="1" data-bbox="692 779 1398 976"> <tbody> <tr> <td data-bbox="692 779 903 846">Fiscal year 2016</td> <td data-bbox="906 779 1398 846">Allocate amount 193,366,789.00 baht Disburse amount 193,366,789.00 baht (100%)</td> </tr> <tr> <td data-bbox="692 851 903 913">Fiscal year 2017</td> <td data-bbox="906 851 1398 913">Allocate amount 91,683,231.00 baht Disburse amount 91,683,230.22 baht (99.99%)</td> </tr> <tr> <td data-bbox="692 918 903 976">Total budget Total disbursement</td> <td data-bbox="906 918 1398 976">Allocate amount 280,050,029.00 baht Disburse amount 280,505,027.85 baht (99.99%)</td> </tr> </tbody> </table> <p>Note</p> <ol style="list-style-type: none"> 1. Request for transfer of change of work for the third installment in the amount of 28,520,796.30 Baht 2. Request for transfer of change of work for the fourth installment amount of 39,286,367.00 Baht 3. Request for transfer of change of work for the fifth installment amount of 5,029,867.00 Baht 4. Request for transfer of change of work for the sixth amount of 27,257,143.54 baht <p>2. Progress report (Monthly report)</p> <p>During the construction of the canal, R 1 range km11+600 – km16+700 Framework 64.8195% working 36.5602%. Slower than plan by 28.2593 % From December 2019 to January 2016, heavy rains in the South caused flooding. Canal R.1 is used as a drainage canal to prevent flooding in the economic area of Hat Yai, so the contractor can not complete the construction. The contractor has accelerated the work to keep up with the plan.</p> <p><u>Things to disclose</u></p> <ol style="list-style-type: none"> (1) S-Curve graph: Report is similar to S-Curve graph as text. The plan is 64.82% working 36.56%, but should be presented as a graph. It's easy to follow. (2) Delays in construction projects: faster than planned 28.26% (3) Photo of project progress (Not shown in progress report) (4) Report problems and obstacles in operation as well as solutions: Report on the problems and obstacles related to the weather and resolve by accelerating the contractor to work in order to keep up with the plan. (5) Accident Report and Prevention Guidelines (Not shown in progress report) 	Fiscal year 2016	Allocate amount 193,366,789.00 baht Disburse amount 193,366,789.00 baht (100%)	Fiscal year 2017	Allocate amount 91,683,231.00 baht Disburse amount 91,683,230.22 baht (99.99%)	Total budget Total disbursement	Allocate amount 280,050,029.00 baht Disburse amount 280,505,027.85 baht (99.99%)
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Total budget Total disbursement	Allocate amount 280,050,029.00 baht Disburse amount 280,505,027.85 baht (99.99%)							

Operational phase	List	Inspection result on information disclosed								
		<p>Contract 4: Renovate of drainage canal R1 with buildings. (km16 + 700 to km21 + 319) Contract period: 1,200 days (Commenced on May 18, 2016 End of contract on August 30, 2019)</p> <p>1. Percentage disbursement of the project according to the fiscal year and budget for the entire project.</p> <p>Budget disbursement</p> <table border="1" data-bbox="692 465 1378 815"> <tbody> <tr> <td data-bbox="692 465 884 555">Fiscal year 2016</td> <td data-bbox="884 465 1378 555">Allocate amount 123,121,374.00 baht Disburse amount 119,071,068.41 baht (96.71%) Balance amount 4,050,305.59 baht (3.29%)</td> </tr> <tr> <td data-bbox="692 555 884 651">Fiscal year aside 2016</td> <td data-bbox="884 555 1378 651">Allocate amount 16,771,354.00 baht Disburse amount 12,721,068.41 baht (75.84%) Balance amount 4,050,305.59baht (24.16%)</td> </tr> <tr> <td data-bbox="692 651 884 719">Fiscal year 2017</td> <td data-bbox="884 651 1378 719">Allocate amount 16,740,200.00 baht Disburse amount 16,740,200.00 baht (100%)</td> </tr> <tr> <td data-bbox="692 719 884 815">Total budget Total disbursement</td> <td data-bbox="884 719 1378 815">Allocate amount 139,861,574.00 baht Disburse amount 135,811,268.41 baht (97.10%) Balance amount 4,050,305.59 baht (2.90%)</td> </tr> </tbody> </table> <p>Note:</p> <ol style="list-style-type: none"> Request for transfer of change of work for the fourth installment amount of 1,055,740 Baht Request for transfer of change of work for the fifth installment amount of 4,355,914 Baht Budget disbursements and progress reports are reported from the beginning of the project until June 2017. <p>2. Progress report (Monthly report)</p> <p>During the construction of the canal drainage system R.1, km 16 + 700-km 20 + 937 and floodgate Khuan 2.</p> <p>Framework 35.3883 % Working 13.9138%. Slower than plan 21.4445% due to accumulated delay of work. The contractor is in the process of accelerating the procurement of machinery and equipment to complete the construction work.</p> <p>Things to disclose</p> <ol style="list-style-type: none"> S-Curve graph: Report is similar to S-Curve graph as text. The plan is 35.39% working 13.94%, but should be presented as a graph. It's easy to follow. Delays in construction projects: slower than planned 21.44% Photo of project progress (Not shown in progress report) Report problems and obstacles to the operation and solutions. Reported problems and obstacles on the machine tools and resolved by accelerating the contractor to quickly provide the machine tools to complete the construction work. Accident Report and Prevention Guidelines (Not shown in progress report) 	Fiscal year 2016	Allocate amount 123,121,374.00 baht Disburse amount 119,071,068.41 baht (96.71%) Balance amount 4,050,305.59 baht (3.29%)	Fiscal year aside 2016	Allocate amount 16,771,354.00 baht Disburse amount 12,721,068.41 baht (75.84%) Balance amount 4,050,305.59baht (24.16%)	Fiscal year 2017	Allocate amount 16,740,200.00 baht Disburse amount 16,740,200.00 baht (100%)	Total budget Total disbursement	Allocate amount 139,861,574.00 baht Disburse amount 135,811,268.41 baht (97.10%) Balance amount 4,050,305.59 baht (2.90%)
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Note: The project completion and completion period has not been fully disclosed due to ongoing construction work under the contract.

Runway and taxi way construction project at Betong Airport, Yala Province, Department of Airports

1. **Necessary reason:** Betong is a large district with a lot of people. It is a border town with many interesting tourist attractions. It is a major economic city in the south, but traveling through the road is difficult, through the mountains, winding routes and through areas of unrest, so it is necessary to build an airport to accommodate the entry into and out of the city of Betong. It is necessary to construct a runway, taxi way, apron and so on. Betong Airport, Yala Province, has been allocated budget for the fiscal year 2016-2020, in accordance with the Cabinet's resolution on October 6, 2015 to implement the infrastructure development plan, investment budget, land cost and construction cost for runway, apron and etc. at Betong airport amount. 1,500,000,000 baht (one billion five hundred million baht) to accommodate airplane size 70-seat.

2. **Objective:** Build runway, taxi way, apron, airport electrical system and internal road at Betong airport.

3. **Location:** Ya-rom subdistrict, Betong district, Yala province.

4. **Project features:** Build runway, taxi way, apron, and etc., at Betong airport.

5. **Budget:** 1,500,000,000 baht (one thousand and five hundred million baht)

6. **Project period:** 3 years (as fiscal year 2016-2018)

7. **Project status:** under construction.

More information: www.cgd.go.th/cs/internet/internet/CoST.html



Figure 11: shows construction progress of runway, taxi way, apron, and etc. at Betong airport, Yala province, Department of airports.

8. Assurance report

Operational phase	List	Inspection result on information disclosed
Project identification and presentation	1. Project owner	Department of Airports
	2. Sector, subsector	Construction of the airport to accommodate the arrival - departure of the city of Betong. This will allow people and staff to travel safely and conveniently, which will have a positive impact on the economy and security in the area.
	3. Project name	Construction of runways, taxi ways, apron, etc., Betong Airport, Yala Province
	4. Project Location	Yarom Subdistrict, Betong District, Yala Province
	5. Purpose	Construction of runways, taxi ways, apron, etc., Betong Airport, Yala Province
	6. Project description	The constructions are as follow: 1. Runway size 30 x 1,800 meter. 2. Taxi way "A" size 18 x 587 meter. 3. Taxi way "B" size 18 x 115 meter. 4. Apron size 94 x 180 meter.

Operational phase	List	Inspection result on information disclosed
		5. Road "1" size 6 x 3,809 meter. 6. Road "2" size 7 x 787 meter. 7. Road "3" size 7 x 300 meter. 8. Road "4" size 7 x 369 meter. 9. Road "5" size 7 x 157 meter. 10. Road "6" size 6 x 811 meter. 11. Road "7" size 6 x 125 meter. 12. Road "8" size 6 x 88 meter. 13. Road "9" size 5 x 247 meter. 14. Road "10" size 7 x 259 meter. 15. Road "11" size 6 x 265 meter. 16. Road "12" size 7 x 68 meter. 17. Road "13" size 5 x 994 meter. 18. Road "14" size 6 x 204 meter. 19. AFL building 20. Car park 21. Drainage system 22. Fencing construction area and aviation area 23. Electrical system and ventilation system 24. Plumping system 25. Officer residential building
Project preparation	7. Expected outcome	To accommodate the arrival and departure of the city of Betong, which will allow the people and staff to travel safely and conveniently. And will positively contribute to the economy and security in the area.
	8. Environmental impact	The essence of the environmental impact report of Betong Airport is summarized below. <ul style="list-style-type: none"> • The case of purchasing land and agricultural crops must be fair. The landowners can accept both sides, and should meet and clarify the details of the purchase of land and compensate the property of those affected for greater understanding. • The issue about public route which the construction site of Betong airport cut through, Road should be built around the airport so the former landlord and people nearby can travel normally. • The impacts on the health of the people should be taken into consideration, especially the impact of noise and dust arising from construction activities that affect nearby communities. Therefore, the project must strictly comply with environmental regulations. • Should consider about breakeven of the project due to the high cost of project construction. However, there is a comment about loss for profit because the project would attract investor as well as tourists into Betong district resulting in economic and social development, and security of the country as well. • Appropriate drainage systems should be designed to accommodate the runoff from the upper catchment area of the project, In addition to prevent and remedy the potential impacts of soil erosion into natural water sources, especially the North Mala Canal and Ya-Rom canal. • The construction of the Betong Airport project should be accelerated as soon as possible. People in the area waiting for a long time. They are also ready to cooperate in providing further information in order to continue the construction of the project. • Should consider to employ people who directly affected by the project, before others, in major position such as expert airport officer, janitors and so on. Because they are considered as people who sacrifice their lands for the project. • For information dissemination to the general public and related agencies are acknowledged. It should be done by closing the publicity leaflet at the local government office in the project area and nearby. And also let the staff directly do public relation. Environmental impact assessment reports can be found at http://eia.onep.go.th/projectdetail.php?id=6455
	9. Land and settlement impact	Land ownership: The Department of Airports must provide land and compensation for crops and buildings totaling approximately 921 rais, totaling 293 million baht, with a budget to provide land and compensation for crops and buildings.

Operational phase	List	Inspection result on information disclosed
		<ul style="list-style-type: none"> Fiscal year 2009 amount 20 million baht Fiscal year 2010 amount 100 million baht Fiscal year 2011 amount 75 million baht Fiscal year 2012 amount 98 million baht <p>To purchase of land and compensation for the implementation of the project, the Department of Airports has ordered no.292/2558 as of May 26, 2015, appointing the land purchase commission by a special method for land acquisition and compensation as mentioned above.</p> <p>The Department of airports has purchase such land for 17 times from 130 individuals, 164 plots totaling 911 rai 3 ngan 46.2 sq.wah valued 247,169,399.83 baht (Two hundred forty seven million one hundred sixty nine thousand three hundred ninety nine baht eighty three satang)</p> <p>Impact: (not expropriated yet)</p>
	10. Details for contacting the staff and the project owner.	Department of Airport. 71 Soi Ngamduplee Rama IV Road, Tungmahamek subdistrict, Sathon District, Bangkok 10120 Phone: 02-287-0320-9 Fax: 02-286-3373
	11. Funding sources	The government budget for the year 2016-2018 totally 1,900 million baht. 2016 budget of 310 million baht 2017 budget of 690 million baht. 2018 budget of 900 million baht.
	12. Project Budget	1,500,000,000 baht
	13. Project budget approval date	October 6, 2015
Procurement	14. Procuring entity	Department of Airports
	15. Procuring entity contact details	Construction and maintenance division, Department of Airports Address: 71 Soi Nguduapi, Rama IV Road, Tungmahamek, Sathon, Bangkok 10120 Tel. 02-28703209 Fax: 02-2863373
	16. Terms of reference (TOR)	Term of reference consists of 1. Background 2. Objectives 3. Bidder qualifications 4. List of details or specific features. 5. Period of implementation and delivery. 6. Payment 7. Budget 8. Criteria and eligibility 9. Warranty for defects and error. 10. Schedule of budget allocation and cost estimate for construction work.
	17. Procurement process	Using electronic bidding (e-bidding) Note: Procurement according to the Office of the Prime Minister on Electronic Procurement, 2006, which requires government agencies with procurement projects with a value of 2 million or more. To use electronic bidding.
	18. Contract type	Lump sum contract
	19. Contract status (current)	Already signed contract with the contractor. And the project is under construction.
	20. Number of firms tendering	1 firm
	21. Cost estimate	1,499,992,000 Baht
	22. Contract administration entity	Department of Airports
	23. Contract title	Runway, taxi way, apron and etc. construction project at Betong Airport, Yala Province
	24. Contract firm (s)	Nawarat Patanakarn Public Company Limited
	25. Contract price	Contract value 1,316,732,396.16 Baht Note: Nawarat Patanakarn Plc. make auction lower than the reference price by the amount of 183,259,603.84 baht or 12.22 percent of the reference price.

Operational phase	List	Inspection result on information disclosed
	26. Contract scope of work	<p>Lump sum construction of runway, taxi way, apron, electrical system, internal road, and others facilities, Betong airport, Betong district Yalo province. List of details or specific features consist of</p> <ol style="list-style-type: none"> 1. Runway size 30 x 1,800 meter. 2. Taxi way "A" size 18 x 587 meter. 3. Taxi way "B" size 18 x 115 meter. 4. Apron size 94 x 180 meter. 5. Road "1" size 6 x 3,809 meter. 6. Road "2" size 7 x 787 meter. 7. Road "3" size 7 x 300 meter. 8. Road "4" size 7 x 369 meter. 9. Road "5" size 7 x 157 meter. 10. Road "6" size 6 x 811 meter. 11. Road "7" size 6 x 125 meter. 12. Road "8" size 6 x 88 meter. 13. Road "9" size 5 x 247 meter. 14. Road "10" size 7 x 259 meter. 15. Road "11" size 6 x 265 meter. 16. Road "12" size 7 x 68 meter. 17. Road "13" size 5 x 994 meter. 18. Road "14" size 6 x 204 meter. 19. AFL building 20. Car park 21. Drainage system 22. Fencing construction area and aviation area 23. Electrical system and ventilation system 24. Plumping system 25. Officer residential building
	27. Contract start date and duration	<p>Commencement Date: October 29, 2016 End of contract: July 15, 2019 Totally 990 days.</p>
Project Completion	34. Project status	<ol style="list-style-type: none"> 1. Percentage disbursement of the project according to fiscal year and accumulative budget Budget disbursement Budget: 443,705,500 baht Disburse: 182,378,640.81 baht (41.10%) Balance: 261,326,859.19 baht (58.90%) Note: No report of budget allocated in fiscal year 2017 so summarized from budget received. 2. Progress report (monthly report) It is designed to facilitate the systematic and effective administration of construction projects. This will allow the construction supervisor and the inspection committee to check the status of construction materials, personnel and machinery in real time, as well as security situations. Currently under construction, the land reclamation / dredging works, digging and pouring concrete to the construction site to adjust the area. The results are as follows. Cumulative framework 9.288% Cumulative working 21.048% Faster than framework 0.76% <u>Things to disclose</u> <ol style="list-style-type: none"> (1) S-Curve graph: Report is similar to S-Curve graph as text but should be presented as a graph. It's easy to follow. (2) Construction Delays: 0.76% faster than planned. (3) Photo of project progress: (Not shown in progress report) (4) Report problems and obstacles to implementation and solutions (not shown in progress report). (5) Accident report and prevention (Not shown in progress report)

Note: The project completion and completion period has not been fully disclosed due to ongoing construction work under the contract.

Demolish and reconstruct the Institute of Dermatology building, Department of Medical service, Ministry of Public Health.

1. Necessary reason:The Institute of Dermatology was established in 1965 as a specialized medical institute in dermatology and a center of research on dermatitis. In 1968, Ministry of Public Health passed a resolution to Department of Medical Services was responsible to set up an Institute of Dermatology. In 1970, the budget was allocated and construction completed on April 18, 1972 for 6-storey building with 576 sq. meter each floor. The scope of mission are for education services, research, study cognitive development, skin knowledge transfer, and tertiary and higher level skin therapies. The building has been enlarge for 3 times.

2. Objective:

Replacing old buildings that are too dilapidated to be repaired and reducing the risk of patients and staff of the Institute of Dermatology.

To build a building for the development of the National Institute of Dermatology and a regional dermatology institute for growth in ASEAN.

To support the increasing number of patients with dermatitis , to be a source of knowledge, research, development, knowledge and medical technology in dermatology, and to be a reference source for medical and public health institutions both in the private and public sectors.

3. Location: 420/7 Rajavithi Rd., Thung Phayathai, Ratchathewi, Bangkok. Built in 1 rai 3 ngan 40.03 sq.wah (2,960.11 sq.m.)

4. Project feature: The 22-storey reinforced concrete building (95.90 meters in height) has 3 floors of basement and usage area of 40,365 sq.m.

5. Cost estimate: 947,000,000 baht

6. Project duration: 4-year (2015-2018) Begin construction on April 22, 2016 End of contract on October 3, 2018.

7. Project status: under construction.

Further information: www.cgd.go.th/cs/internet/internet/CoST.html

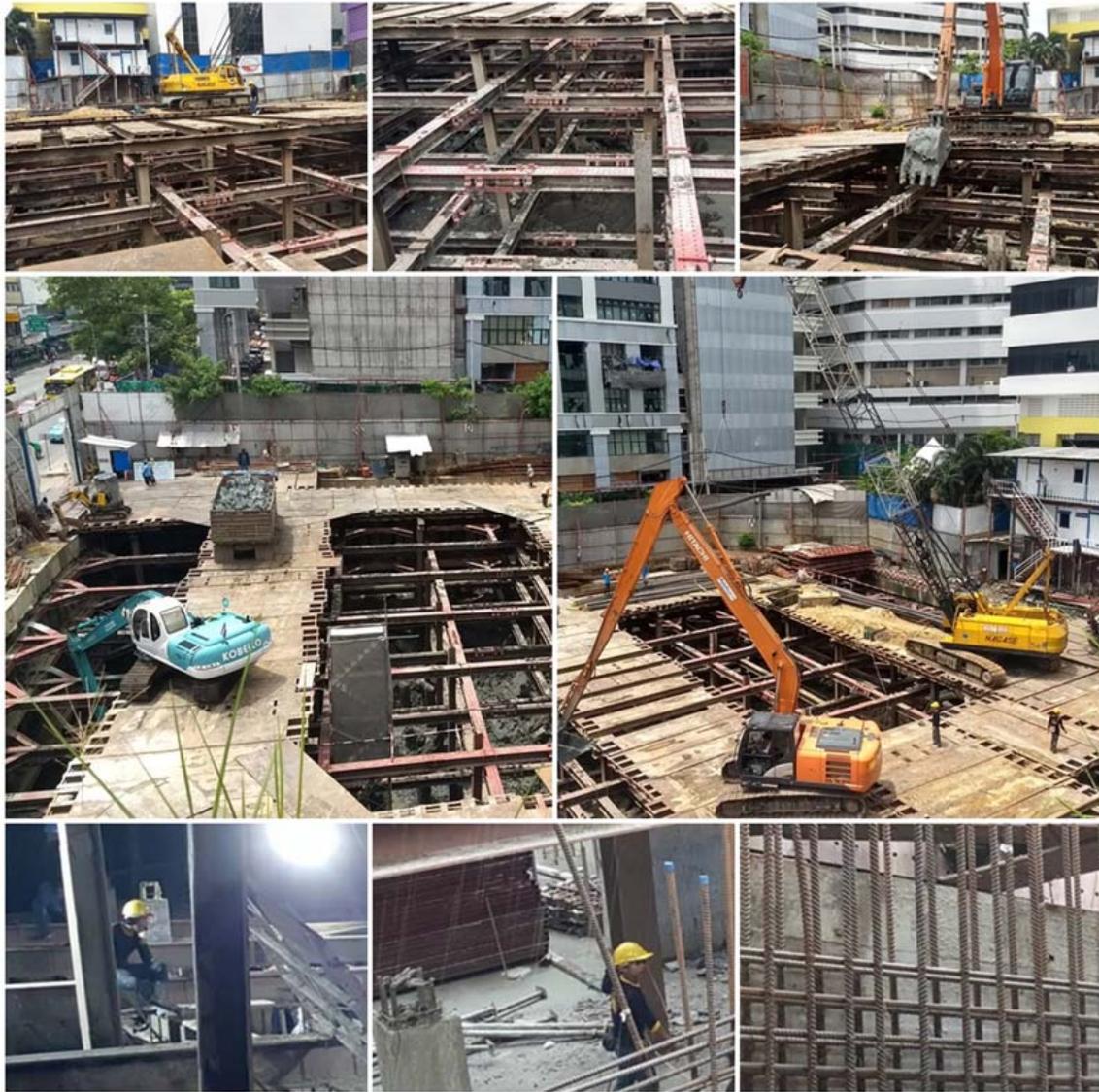


Figure 12: Progress on demolish and reconstruct the Institute of Dermatology building.

8. Assurance result

Operational phase	List	Inspection result on information disclosed
Project identification and presentation	1. Project owner	Institute of Dermatology, Department of Medical Services, Ministry of Public Health
	2. Sector, subsector	Development plan for public health, strategic education in public health, morality, ethics and quality of life.
	3. Project name	Demolish and reconstruct the Institute of Dermatology building
	4. Project Location	420/7 Rajavithi Road, Tung Payathai, Rajthevee, Bangkok 10400
	5. Purpose	<ol style="list-style-type: none"> 1. To replace the old institute of dermatology building that is in a state of deterioration beyond repairs and prevent damage and harm to the building's rupture. Reduce the risk of customers and staff of the Institute of Dermatology. 2. To support the development of the National Institute of Dermatology, be a regional dermatology institute, and to support the expansion into ASEAN community. 3. To accommodate the increasing number of dermatitis patients, be the source of knowledge transfer and research develop knowledge and dermatology technology, and be a reference source for medical and public health care services both in the public and private sectors, both domestic and international.

Operational phase	List	Inspection result on information disclosed
	6. Project description	Construction of a new 22-storey dermatology institute building replacing the old building, No. 10892, Design and Construction Division, Department of Health Service Support, Ministry of Public Health
Project preparation	7. Expected outcome	<ol style="list-style-type: none"> 1. There is a potential and modern outpatient service building that can accommodate and provide screening services. Dermatitis to the average 800 people per day, or about two hundred thousand per year. 2. Have safe and adequate rooms and facilities to support modern medical equipment. There is space for inspection and service. Enhance the potential for diagnosis and treatment effectively and appropriate. 3. People have access to medical and public health services with rapid detection effectively, reducing the number of dermatitis patients, reducing the cost of medical treatment, and reduce the health, economic and social problems and affect the good quality of life of the people.
	8. Environmental impact	<p>There are no EIA reports according to the Notification of the Ministry of Natural Resources and Environment dated June 20, 2012, the Government Gazette, page 7, Article 29 states that the type of hospital or hospital.</p> <ol style="list-style-type: none"> 1. In the case of a construction project located next to a lake or beach, which may be detrimental to the quality of the environment, has patient beds over 30 beds or over. 2. In the case of construction projects not covered by Article 1, only has beds for overnight stay of 60 beds or more. <p>Therefore, Institute of Dermatology building project with demolition has beds for 43 patients overnight, are not in the construction project according to the notification of the Ministry of Natural Resources and Environment in both cases.</p>
	9. Land and settlement impact	There is no land ownership issue and the impact because of using former site.
	10. Details for contacting the staff and the project owner.	<ol style="list-style-type: none"> 1. Mrs. Jariya Hongthong Position Project Coordinator Institute of Dermatology building Phone 081-6222175 E-mail: construction59@hotmail.com 2. Mrs. Laeard Buaraj Procurement specialist, Head of procurement and maintenance Phone 095-8492828 E-mail: laeard2559@gmail.com 3. Mrs. Kanokporn Somwat Academic Technical Specialist Phone 089-5181922 E-mail: qui22@hotmail.com
	11. Funding sources	The government budget and funding for the dermatology institute, year 2016-2019
	12. Project Budget	<p>All budgets 1,148,280,000 Baht consisting of</p> <ul style="list-style-type: none"> • Government budget 1,067,900,400 Baht • Funding to Institute of Dermatology 80,379,600 Baht
	13. Project budget approval date	February 23, 2016
Procurement	14. Procuring entity	Institute of Dermatology, Ministry of Public Health
	15. Procuring entity contact details	<ol style="list-style-type: none"> 1. Mrs. Jariya Hongthong Position Project Coordinator Institute of Dermatology building Phone 081-6222175 E-mail: construction59@hotmail.com 2. Mrs. Laeard Buaraj Procurement specialist, Head of procurement and maintenance Phone 095-8492828 E-mail: laeard2559@gmail.com 3. Mrs. Kanokporn Somwat, Academic Technical Specialist Phone 089-5181922 E-mail: qui22@hotmail.com
	16. Terms of reference (TOR)	<p>Consist of</p> <ol style="list-style-type: none"> 1. Background 2. Objective 3. Bidder qualification. 4. List or specific features 5. Construction period and delivery 6. Cost estimate 7. Work period – payment period

Operational phase	List	Inspection result on information disclosed
		8. Other details 9. Standard for craftsman 10. Compliance with laws and regulations. 11. Contact for more information or to send comments, or suggestion toward table of budget allocation and cost estimate in construction work. 12. List of construction work and scope of work.
	17. Procurement process	Using electronic bidding (e-bidding) Note: Procurement according to the Office of the Prime Minister on Electronic Procurement, 2006, which requires government agencies with procurement projects with a value of 2 million or more. To use electronic bidding.
	18. Contract type	Lump sum contract
	19. Contract status (current)	Already signed contract with the contractor. And the project is under construction.
Procurement	20. Number of firms tendering	3 firms are 1. Infinite Engineering and Constructions Co., Ltd. 2. Siam Korrajij Company Limited 3. Benjamas Company Limited
	21. Cost estimate	1,060,683,500 Baht
	22. Contract administration entity	Department of Medical Services, Ministry of Public Health
	23. Contract title	Demolish and reconstruct the Institute of Dermatology building
	24. Contract firm (s)	Infinite Engineering and Constructions Co., Ltd.
	25. Contract price	The contract value of 947,000,000 baht consists of 1. Government budget 866,620,400 baht 2. Funding of the Institute of Dermatology 80,379,600 baht. Note: 1. Institute will manage their fund by spending their own money first and then government budget. 2. Infinite Engineering and Construction Co., Ltd. is bidding lower than the reference price by 113,683,500 Baht or 10.72% of the cost estimate.
	26. Contract scope of work	The construction and delivery period of Demolish and reconstruct the Institute of Dermatology building is completed within 1,260 days, divided by the work and the payment is made in 62 installments.
	27. Contract start date and duration	Contract start date: April 21, 2016 Contract end date: October 3, 2019 Total 1,260 days
Implementation	28. Variation to contract price	No variation to contract price
	29. Escalation of contract price	No escalation of contract price
	30. Variation to contract duration	The duration of the contract was changed from the construction period of 1,260 days to 1,263 days. The contract expired on October 6, 2019 due to lay the foundation stone ceremony. Remark: under proposing to Department of Medical Services for approval dated September 10, 2017. There is no disclosure of variation to contract duration.
Project Completion	34. Project status	1. Percentage disbursement of the project according to fiscal year and accumulative budget (1.1) Percentage disbursement by fiscal year 2016-2017 (starting from April 22, 2016 to September 30, 2017). Details are as follows: Fiscal year 2016 - Budget: 58,145,800 baht (100%) - Disburse: 1 st – 4 th installment 58,145,800 baht (100%) - Balance: 0 baht (0%) Fiscal year 2017 - Budget: 196,881,300 baht (100%) - Disburse: 5 th – 7 th installment 40,436,900 baht (20.54%) - Balance: 156,444,400 baht (79.46%)

Operational phase	List	Inspection result on information disclosed
		<p>(1.2) Accumulate disbursement for all 7 installment (Start April 22, 2016 to September 30, 2017). Details are as follow:</p> <ul style="list-style-type: none"> - Budget: 255,027,100 baht (100%) - Disburse: 98,582,700 baht (38.66%) - Balance: 156,444,400 baht (61.34%) <p>Note: Under operation for 8th – 9th installment. details are as follow: Work on 8/62 completed by 82%. During pouring the concrete pillar, wall elevator, and staircase up to 3rd floor. Work on 9/62 completed by 15%. Under installation of tower crane together with hand on security document and related job. Operation from April 22, 2016 to October 2, 2017 totally 529 days. Remaining day is 73 days. The total workload was finished about 15.08%.</p> <p>2. Progress report (monthly report) Things to disclose</p> <p>2.1 S-Curve graph: Report is similar to S-Curve graph as text are work on 7/62 all finished. Under operation for work on 8/62 and 9/62 such as concrete foundation is completed. Pour some concrete pillars and tower crane installation are under operating. 82% of work on 8/62 and 15% of work on 9/62 are completed. Remain of related works on are under operation. Total completion of the project is about 15.08%</p> <p>2.2 Construction delay report: not shown in progress report</p> <p>2.3 Photo of project progress: Have photos with descriptions that correspond to the progress.</p> <p>2.4 Report problems and obstacles to the operation and solutions: Reported problems and obstacles related to weather and building foundations, but did not report any solutions to accident reports and preventive measures. (Not shown in progress report)</p>

Note: Project implementation and project completion phase has not been fully disclosed due to ongoing construction under contract.

Rama III-Dao Khanong-Western outer Bangkok Ring Special Expressway

1. Background: It is an expressway project under the master plan of the Expressway in Bangkok and its vicinity, which is a network of expressways connecting the radial route between Bangkok and the western areas of Bangkok and its vicinities. Including travel from provinces in southern Thailand. It helps to get to Bangkok quickly and to reduce the current traffic jam on Rama II Road.

2. Objective: To expand the Expressway network to accommodate travel between the outer and inner areas of Bangkok efficiently. To help alleviate traffic congestion on Rama II road in area of Dao Khanong -Outer ring, and Chalem Mahanakorn Expressway in area of Bang Khlo – Dao Khanong. It is a route used for travel and transportation in case of natural disasters and emergencies such as floods. It can also be used as a replacement for the Rama 9 Bridge, which will be closed for maintenance, which will make the transportation to the south no problem.

3. Project route: Starting point (km0+000) is on Rama II road which is km13+000 of Department of Highways. Total distance is 18.7 kilometer.

4. Structural frame:

(4.1) Western outer ring road around Bangkok to Dao Khanong (on Rama II): is an elevated structure overlaid along traffic island of Rama II road sized 6-lane. Its structural frame is precast segmental concrete box girder.

(4.2) Dao Khanong - Suksawat road (overlaid Chalem Mahanakorn Expressway): is an elevated road overpass on the Chalem Mahanakorn from Dao Khanong to a bridge parallel to Rama 9 bridge sized 6-lane. Its structural frame is precast segmental concrete box girder with a lower structure as portal frame.

(4.3) The bridge over Chao Phraya river: is parallel cable support bridge, located on south of Rama 9, sized 8-lane. The structure of the bridge is a Concrete - Steel Composite Deck. High pillars are double pillars which their cables are arranged as two level system.

5. Budget: Estimated construction cost for 5 contracts are totally 29,296 million baht.

6. Current project status: under preparation (Draft scope of work (TOR))

Further information: www.cgd.go.th/cs/internet/internet/CoST.html



Figure 13: Rama III-Dao Khanong-Western outer Bangkok Ring Special Expressway

7. Assurance report

Operational phase	List	Inspection result on information disclosed
Project identification and presentation	1. Project owner	Expressway Authority of Thailand (EXAT)
	2. Sector, subsector	No budget is allocated. The fund was financed through the Thailand Future Fund (TFF) under the cabinet resolution on May 30, 2017.
	3. Project name	Rama III-Dao Khanong-Western outer Bangkok Ring Special Expressway
	4. Project Location	It has a starting point at km13 + 000 of Rama II Road (about 2.5 km) before the Bang Khun Thian Interchange at the western outer ring road of Bangkok. The line overlaid along the traffic island of Rama II Road to the northeast until Daohanong. Then the line will overlap on the Chalem Mahanakorn Expressway to Rama III Road near the intersection of Banglou. The linetraffic is end by connecting to the Si Rat Expressway and the Chalem Mahanakorn Expressway.
	5. Purpose	The Rama 3-Dao Khanong-Western Outer Ring Road Expressway is an expressway project under the Metropolitan Expressway Master Plan, which is a network of expressways connecting the radial route between Bangkok and the western part of Bangkok and its environs, including journey from the provinces of southern Thailand. To make the trip into Bangkok fast and convenient, and reduce the current traffic jam on Rama II Road.

Operational phase	List	Inspection result on information disclosed
	6. Project description	The Rama 3-DaoKhanong-Western Outer Ring Road has starting point at km13 + 000 of Rama II Road. It is a six-lane elevated roadway, overlaid along the traffic island of Rama II Road in the northeastern part of the city. Then the line will be bent to the right, overlapping with the Chalem Mahanakorn Expressway and across the Chao Phraya River at present Rama 9 Bridge. It will be an 8-lane bridges with a main span not less than 450 meters along the south side of the Rama 9 Bridge. The route will connect with the Si Rat Expressway and the Chalem Mahanakorn Expressway at the intersection of Bang Khlo, which is the end of this project, the expressway has a total distance of 18.7 km with 7 up-down and 3-interchange.
Project preparation	7. Expected outcome	<ol style="list-style-type: none"> 1. Alleviate traffic jams on Rama II Road, Dao Khanong area-Western Outer Bangkok Ring Road, Chalem Mahanakorn Expressway, Bang Khlo-Dao Khanong area, and Rama IX Bridge 2. An alternate route in case of traffic closure of Rama Bridge 9 for bridge maintenance. 3. Expansion of the Expressway Network to enable efficient travel between the outer and inner areas of Bangkok. 4. It is a route used for travel and transportation in the event of natural disasters and emergencies, such as floods. 5. It is a project that provides high economic returns.
Project preparation	8. Environmental impact	<p>EXAT has conducted an environmental impact study for the Rama IX Expressway 3- Dao Khanong - Outer Ring Road West Bangkok The environmental impact assessment report was prepared in August 2013 and submitted to the Office of Natural Resources and Environmental Policy and Planning (EPPO) on February 25, 2014. Currently, the National Environment Board (GM) has approved the report on May 27, 2016.</p> <p>The significance of the EIA report of the Rama III Expressway Project can be summarized as follows.</p> <ul style="list-style-type: none"> - The project must have a protocol to prevent and solve environment impacts and protocol to monitor important environmental impacts such as air quality. Dust protection from construction by having at least 2 meter high fence above the ground. Noise concern requires loud noise construction can be done during the day. Vibration concern requires to use bored pile. Pile drilling and build foundation can be done during the day. - The project must provide third party to implement environmental impact measurement and the budget is included in project cost under supervision of Expressway Authority of Thailand. And set up a monitoring and implementation of environmental measures committee (EXAT, Office of natural resources and environmental policies and planning, representative from Bangkok, NGO, and experts) to supervise monitoring and environmental measures compliance. <p>EIA report is available at the Office of Natural Resources and Environmental Policy and Planning.</p>
	9. Land and settlement impact	<p>Land ownership:</p> <p>Based on the detailed design, the estimated 74 plots of land were expropriated, with an area of 6 rai 1 ngan 9.1 square wah (2,509.1 square wah) and 78 edifice.</p>  <p>Impact: Not expropriation yet</p>

Operational phase	List	Inspection result on information disclosed
Project preparation	10. Details for contacting the staff and the project owner.	Officers: Mr. Sathit KongMueng, Construction Department of the Expressway. Phone 02-558-9800 ext. 617 Project Owner: Supplies Division, General Management Department Expressway Authority of Thailand 2380 Phahon Yothin Road, SenaNikom, Chatuchak, Bangkok 10900 Phone 0 2558 0800 ext. 2111
	11. Funding sources	EXAT will proceed with the project through fundraising through the Thailand Future Fund (TFF)
	12. Project Budget	Project cost (Including work control fee and K fee) 30,437 million Baht Land ownership fee for construction of the project 807 million Baht. Total 31,244 million Baht
	13. Project budget approval date	The Cabinet passed a resolution on 6 June 2017 to approve EXAT to operate the Rama 3 – Dao Khanong – Western Outer Bangkok Ring Road.
Procurement	14. Procuring entity	Expressway Authority of Thailand
	15. Procuring entity contact details	One Stop Service Center Expressway Authority of Thailand 2380 Phahonyothin Road Chatuchak, Bangkok Phone 02-5795185 and 02-579-0043
	16. Terms of reference (TOR)	In process of drafting Term of Reference (TOR)
	17. Procurement process	Using electronic bidding (e-bidding)
	18. Contract type	Price adjustment contract Note: The price adjustment agreement is for K for certain material prices that fluctuate by market price. Both Contract Type and Unit Price can be specified k fee.

Note: Since the project was approved by the Cabinet on June 6, 2017, the disclosure will cover project identification and presentation phase, project preparation phase, and some list of procurement phase. The current status of the project is drafting term of reference (TOR).