

Concession Contract in the Public Private Partnership: Case Study of Don Muang Tollway and Second Stage Expressway in Thailand

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Abstract

Public-private partnership (PPP) is a contractual relationship between public and private sectors in infrastructure project development. Concession contract becomes an important aspect in PPP because it covers the whole rights and obligations of both government and concession company. This paper aims to study how a concession contract for PPP project is arranged and implemented in Thailand. A case study approach is used to examine in-depth, and detailed information of PPP concession contract, as well as its related contextual conditions. This research focuses on concession contract of roadway infrastructure. Five major scopes of concession contract (i.e. Basic Agreement, Pre-Construction, Construction, Operation, and Termination) are discussed in this paper. From the case study of two PPP projects, it is found that the two concession agreements had been carefully arranged by the expert because almost all essential issues have been addressed in the concession agreement.

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1. Introduction

Many countries have attempted to apply the PPP approach for the infrastructure development. Some projects failed to achieve their objectives. It was found that a good understanding of PPP concept by all major stakeholders is critical for the successful implementation. There are numbers of examples of PPP failures caused by government actions, which are indicated by poor understanding in PPP concept such as: lack of government support and guarantees, unclear contract provisions, an inappropriate of assurance from government. Good understanding of PPP concept can be defined into three factors. The first, know the nature of PPP concept that has a long period partnership, which is, comprises so many barriers that should be considered. Secondly, know how the PPP project becomes viable until the end of concession period, which needs a deep knowledge in the project financing. Finally, the third factor is the awareness of the government support in terms of legal perspective that all scope of PPP project is covered into a concession contract.

Concession contract is the connector between the government authority and the private sector through the concession company in the PPP project. Kumaraswamy [1] stated that the failures of PPP project implementation are triggered by the concession contract which is not arranged carefully. However, when the contract becomes unenforceable at the project implementation stage, a good concession contract is not the only solution to prevent the project failures. Numerous problems occurred during the contractual implementation. The main problems have been identified by several researches [2], [3], [4], [5], and they can be categorized into two groups of problems, controllable and uncontrollable. The controllable problem comprises Toll rate adjustment (cash flow), Toll collection, Competing facilities/ Operation revenue, Forecast failure/ financial feasibility,

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Completion delays. Then, the uncontrollable problems are Land acquisition, Government inconsistency, Expropriation, Suspended Loan, Foreign exchange lost, and Claim from contractor. This article aims to study how a concession contract for PPP project is arranged and implemented in Thailand. The next part of this article discusses contracts and agreement, concession contract issues, explores the scope of concession agreement, and background of PPP projects in Thailand. Then the case study analysis of concession agreement is presented at the end of this article.

2. Contracts and Agreements

Fernholz & Fernholz [6] stated that a central feature of PPP's is the contractual arrangement. PPP contracts are often highly technical, cumbersome, and have significant legal, financial and technical implications. There are several forms and degrees of private sector participation in the provision of public services. It is useful to remember that within this range; PPP's represent long-term contracts with significant equity participation and financial risks that are accepted by the private company. The range of contractual forms includes the more traditional shorter term and more recent, innovative and long term approaches. The higher degree traditional forms of private participation consist of contracting out investment activities (from design to build and transfer) and different forms of service in management contracts and leases. Some of these are:

2.1. Service contracts

Service contracts (for the duration of one to several years) can enclose the delivery of part of activities required to provide the service, for example billing services. Service contracts are the more traditional form of private participation.

2.2. Leases

Lease of assets for operation under a contract with a private operator for a fixed or determined fee.

2.3. Management contracts

Management contracts under which the municipality owns the assets and major elements of the service are contracted out to the private sector. The traditional forms have limitations such as inadequate incentives for long-term participation of the private sector, and lack of long-term maintenance provision resulting in the deterioration of public services. Some EU countries are adopting clear guidelines and regulations to ensure that decision making on public service provision considers the long-term issues, especially project lifecycle evaluation of costs and benefits. Other contractual arrangements provide longer-term development, implementation and supervision of services, or innovative and alternative approaches.

2.4. Concession contracts

For example a build, operate and transfer project (BOT). Under this modality, the contract can specify the temporary transfer of public assets, such as land, buildings and some equipment, for an extended duration of time. The concession contract normally specifies the conditions of service, coverage, quality, and sometimes levels and quantities of additional investment needed to perform the contract. The assets used for the delivery of services are transferred back to the public sector under specific conditions.

2.5. Privatization

Divestiture or new projects (Greenfield) that can start with the design, building, operating, own (DBOO); build, operate and own (BOO), and in some cases transfer at the end of the project (BOOT). Greenfield or new long term concessions contracts: build operate and transfer (BOT), build, operate, own and transfer (BOOT), design, build and operate (DBO), build, operate and own

(BOO), are some of the variations of the types of contracts that can be implemented through long term PPP's. Some of these can be seen of Fig. 1.

2.6. Joint Ventures

If the local government and the private party want jointly to manage the partnership, joint ventures are the more common form of organization.



Fig. 2. Some Types of PPP Contractual Arrangements (New Projects)

Gentry and Fernandez [12] confirmed that private sector involvement could vary from the provision of service to the ownership of the facilities. Its participation depends on the degree of government control and private economic scale. Fig. 3 explains five types of private involvement. It varies from the simplest form of partnership (service contract), where the public sector only charges the private sector for rental fee to provide the service, to privatization, where equity is transferred completely to the private sector without time limitation [7].

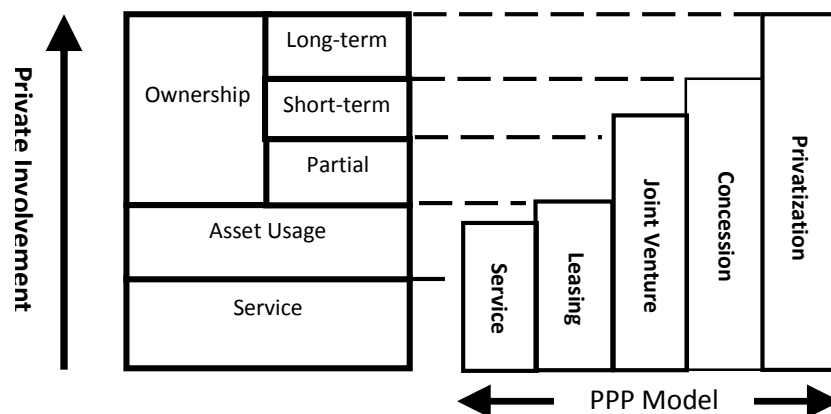


Fig. 3. Spectrum of PPP Model [7]

3. Concession Contract Issues

Concession contracts between a grantor and a concessionaire should be unambiguous with respect to the risks involved. Preferably, a model concession contract should be prepared to enhance fairness and the clarity of negotiations between the parties involved, and to improve the efficiency of negotiation by clarifying a starting point of discussion. The main issue in the concession contract relates to: (i) grants of concession; (ii) credit enhancement of the concession grantor; (iii) toll rate setting and adjustment; (iv) conditions for contract termination; (v) step-in rights of lenders/concession grantor; (vi) changes in law; (vii) exclusivity; (viii) dispute resolution; (ix) mitigation of risks; and (x) post-concession issues [8].

4. The Scope of Concession Agreement

Concession agreement commonly covers five major scopes, such as Basic Agreement; Pre-Construction; Construction; Operation; and Termination that are shown in Fig.4. In fact, concession agreement's content is unique inasmuch as various forms of concession agreement have been made for bridging the needs of both parties. Furthermore, the diversity of the content of concession agreement is caused by the nature agreement itself. Both parties have authority to put anything into concession agreement that can make them feel secured and fair, except its content taking against the law is used to enforce the agreement.

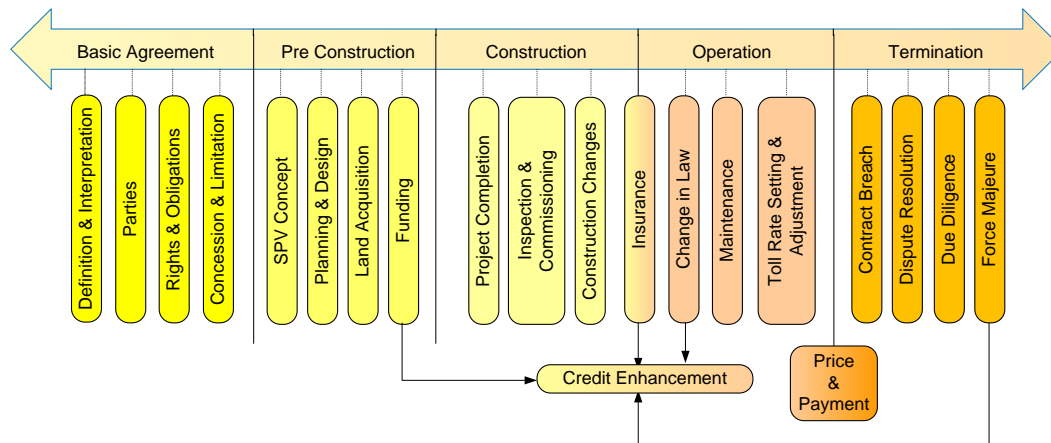


Fig. 4. Five Major Scope of Concession Contract

5. Toll Road in Thailand

The developing countries especially in South East Asia were struck by a severe monetary crisis in 1997, thus, the infrastructure projects were brought to a halt. No project within those countries in this region could survive during the crisis except it was financially supported by an international financier. It was recorded that the Thai economic crisis began in mid 1997. And the chaotic process which PPP projects have developed may have been a contributory cause of that crisis. The involvements of international financial institutions have proved in helping the severe countries with such severe economic complications. At the following years, slowly but surely, some countries could recover their economic crisis. For the example, Asian development Bank (ADB) is assisting the Thai Government to improve the current process. Now then, Bangkok Express Company Limited (BECL) is a toll road company of Second Stage Expressway, one of the BOT projects in Thailand, which can survive and be a successful PPP project. In order to study more in depth about the toll road in Thailand, the national background comparison between the UK and Thailand is presented in Table 1. The components of comparison include Government Type, Legal System, Law (Act), Government Policy, GDP, Budget, Public Debt, Exchange Rate, and Road Ways.

Table 1. National Background Comparison [9]

No	Components	UK	Thailand
1	Government Type	constitutional monarchy	constitutional monarchy
2	Legal system	based on common law tradition with early Roman and modern continental influences; has nonbinding judicial review of Acts of Parliament under the Human Rights Act of 1998; accepts compulsory ICJ jurisdiction, with reservations	based on civil law system, with influences of common law; has not accepted compulsory International Court of Justice (ICJ) jurisdiction
3	Law (Act)	New Roads and Street Works Act 1991	Highway Concession Act, B.E. 2542 (1999)

4	Government Policy	National government is in-charge of overall policy making and funding of road projects. Local government prepares annual plans for regional and local roads, for approval by national government.	In the late 1980's government policy was 'private sector first' - and individual government agencies were encouraged to contract BOT expressway and mass transit projects; Adopted a master plan in April 1997 (4,150 km of motorway to be built in the next 20 years)
5	GDP - Per capita (PPP)	\$31,800	\$9,200
6	Budget:	<i>revenues: \$973 billion</i> <i>Expenditures: \$1.04 trillion; including capital expenditures of \$87 billion (2006 est.)</i>	<i>revenues: \$40.31 billion</i> <i>Expenditures: \$40.34 billion; including capital expenditures of \$5 billion (2006 est.)</i>
7	Public debt:	42.2% of GDP (2006 est.)	43.5% of GDP (2006 est.)
8	Exchange rate	Baht per US dollar - 37.882 (2006), 40.22 (2005), 40.222 (2004), 41.485 (2003), 42.96 (2002)	
9	Road ways	<i>total: 388,008 km</i> <i>paved: 388,008 km (includes 3,520 km of expressways) (2005)</i>	<i>total: 57,403 km</i> <i>paved: 56,542 km (include 3,502 km of expressways)</i> <i>unpaved: 861 km (2000)</i>

5.1. Institutional Road Administrator

Table 2 shows the components on the institutional road administrator. However, the characteristics of major participants are also influenced by the form of institutional road administrator.

Table 2. Institutional Road Administrator [10]

No	Components	Thailand	
		DMT	SSE
1	Transportation (Highway)	Department of Highways (DOH): under the Ministry of Transport*	Department of Highways (DOH): under the Ministry of Transport
2	Toll Road/ Expressway	Expressway and Rapid Transit Authority of Thailand (ETA) : a state enterprise under the Ministry of Transport	Expressway and Rapid Transit Authority of Thailand (ETA)*: a state enterprise under the Ministry of Transport
3	Finance	The Ministry of Finance	
4	Environment	Ministry of Science, Technology and Environment	

* The concession grantor of toll road project

Thailand has experienced the crossing function within the institutional road administrator through granting the concession right to the toll road company by two bodies. However, the competition between Department of Highway and ETA was showing the different result of toll road project implementation. For other institutional road administrators are likely to be similar to some extent.

7. Case Study Analysis of Concession Agreement

7.1. Don Muang Tollway's Concession Agreement

The case study analysis of concession agreement on Don Muang Tollway can be presented as follows:

(i) *Limitations on competing facilities:* The project vehicle was led by Dywidag, a Germany contractor. Since the contractor did not address the non-competitive clause in the concession agreement, the operation revenue was far behind the projected estimation in the feasibility study. It seems the contractor did not consider about the risk during the operation period of concession project. This condition may have been caused by the behavior of the contractor that only considered the risk during the construction period. However, the BOT project is totally different from the nature

of common projects. By allowing any competitive facilities build near the concession area, the uncertainty of its source of funds will damage the operating revenue.

(ii) *Selection of SPV concept*: The selection of SPV concept determines the content that should be addressed in the concession agreement. However, based on the history of Don Muang Tollway development, the concept this project can be identified as project finance. It can be proved by the establishment of Don Muang Tollway Public Company Limited is purposed solely for Don Muang Tollway project. Therefore, the cash flow revenue of the project is used for financing the project with non-recourse debt. But a fake BOT concept has been adopted in this project. Government perceived that “the huge” amount of money upon toll operation revenue should be shared to the government by a profit sharing policy. Thus, the concept of project finance was disturbed since a cash flow problem occurred.

(iii) *Penalty and Bonuses*: According to Kerf, *et. al.* [11], the promises of bonuses and threats of penalties are purposed for enhancing operators’ incentives to carry out their general responsibilities under the contract and to meet the imposed performance targets. The Don Muang Tollway only defined the penalty issue at MoA No.2 due to the additional construction of Northern Extension. Hence, the penalty was addressed for delayed completion by charging THB 300,000 per day with some exceptions caused by external factors. Since the completion delayed did not occur, this penalty would never be charged to the company. However, any penalty and bonus were not addressed for the operational stage.

However, Don Muang Tollway has faced many problems although only three essential issues of the concession agreement were not addressed. The other issues that were addressed in the concession agreement but still have many problems such as:

- *The regulation regime*: The operation revenue would be affected by the regulation regime, if the toll tariff adjustment does not comply with its ability to pay the debt obligations. However, since the toll rate setting was initially stipulated in the concession agreement and even it was promised to be adjusted every 5 year (under clause 20), the rigidity of the contract through “closed price” was forced the Don Muang Tollway Company to face a heavy debt due to many reasons such as forecast failure, cash flow stuck, government inconsistency to remove the two overpasses, and tariff reduction by Government. Furthermore, the problems caused by the regulation regime caused the disbursements freeze by the lender.

- *Change in Law*: Both parties apparently did not realize about the risk of Change in Law that could cause severe impact to the project itself. One of the examples of changing the law was shown by the government policy in the foreign investment policy. According to the original agreement, the sponsors would support 20% equity in foreign currency and 80% loans in Thai Baht. However, shortly after the concession agreement was signed, the Thai government amended the foreign investment policy to provide both equity and loans in foreign currency. Had this rule been enacted earlier, investors would have lost interest in the development as the revenue would be in Thai Baht and subject to exchange rate fluctuations. Finally, the shareholders had to increase the equity to 25% and secure additional privileges from Thai government in order to persuade lenders to proceed with the project [4]. Nevertheless, the issue about any changes to existing or introduction of new laws, which result in increase of taxes and/or duties directly to the company, had been addressed in the clause 25 (Adjustment of Toll Rates and Concession Period).

- *Political, Legislative & Regulation*: The Political, Legislation & Regulation are commonly packed into one clause, Change in Law, since it has strong relationship to each other. Thai politician had intervened to the contractual implementation of the concession agreement. They refused the agreed commitment of dismantling the two overpasses that was obviously considered as contractual breach, which obstructed the project revenue growth due to low traffic users. Furthermore, the purposes of BOT concept failed to be achieved due to Government inconsistency.

7.1. Second Stage Expressway's Concession Agreement

The case study analysis of concession agreement on Second Stage Expressway can be presented as follows:

(i) *Selection of SPV Concept:* The project finance concept was initially adopted in the Second Stage Expressway. At the earlier of opening toll road, the actual traffic flow was higher than the projected. It was very successful example as a SPV with the project finance concept. The operation revenue of BECL could pay the project debt with non-recourse debt. However, the project finance concept is purely adopted for BOT project. Since the project finance concept was not addressed in the concession agreement, the government did not realize about the BOT procurement system is using a project finance concept or corporate finance concept. BECL should share the profit with the government during the concession period and bear the heavy debt risk.

If the sharing profit were used for the BTO procurement, the project vehicle wouldn't bear the heavy debt as its risk should be taken by the government. Since the SPV concept was not clearly defined in the concession agreement, the "BTO" procurement is used at BOT project in Second Stage Expressway.

Interestingly, without any type of SPV selection that was addressed in the concession agreement. The Bangkok Expressway Public Company Limited has been successfully transferred from project finance concept into corporate finance through its subsidiary company (Northern Expressway Company Limited), which operates the northern extension of Second Stage Expressway. That means the Second Stage Expressway uses the combination between project finance and corporate finance.

(ii) *Penalty and Bonuses:* The stipulation about any bonuses has not been addressed specifically in the concession agreement because the government may assume that the profit of the BOT project is quite high. Nevertheless, the stipulation about the responsibility of the company to any delay and/or any defect were addressed in clause 12. And this issue can be included as penalty clause.

However, Second Stage Expressway has faced many problems even though only two essential issues of the concession agreement were not addressed. The other issues that have been addressed in the concession agreement but still have many problems such as:

- *Price Adjustment:* Even though the Price Adjustment clause has been addressed in the concession agreement, the problems regarding Toll increment were caused by the government breach.
- *Assurance of Payment:* During the construction of delayed project, the lender suspended the loan to the BECL. It was caused by the uncertainty of opening the toll as scheduled date. Therefore, such delay was caused by land acquisition by ETA which failed to deliver the land as scheduled.
- *The various types of guarantees/warranties:* Government promised to give any guarantees/warranties, which stipulated in the Concession Agreement, such as No Interruption (during the construction and operation) guarantee by ETA, No Competing Roads and Compensation, The Compensation for any Force Majeure Event or Exceptional event, General warranties (Comfort, No Intervene, Land Acquisition, licenses and permits), Right to have the substituted Entity, and Exclusivity. However, the expropriation guarantee was not addressed in the concession agreement. This absence was resulted in the expropriation toward the major sponsor, Kumagai Gumi.

Nevertheless, any guarantees/ warranties from the Government were only promises due to Government breaches (see SSE milestone at previous chapter). Any credit enhancements from the third party or the Government itself are useless since the Government breaches their commitment.

Nevertheless, the company still can claim to the third party for the compensation if the project is terminated.

The disputes caused by ETA's breach such as Right to operate,

- *Concession rights & Obligation:* Even though the collection right of BECL in the SSE was stipulated in the concession agreement, government breached their commitment. Until now the disputes regarding the operation revenue and profit sharing have been processed in the Thai Arbitration Institute (See milestone of contractual implementation at the previous chapter).

8. Conclusion

From the comparison of concession agreement scope, the 2 concession agreements of PPP projects in Thailand addressed almost all of the essential issues of concession agreement. Nevertheless, some issues were not addressed due to some reasons. Don Muang Tollway's Concession Agreement has not addressed only three issues (Limitations on competing facilities, Selection of SPV concept, and Penalty and Bonuses). The other issues that have been addressed in the concession agreement (e.g. Regulation Regime, Change in Law, Political, Legislative and Regulation) still did not prevent the problems due to inconsistency of the government. The Second Stage Expressway has faced many problems even though only two essential issues of the concession agreement were not addressed (Selection of SPV Concept and Penalty and Bonuses). The other issues that have been addressed in the concession agreement (e.g. Price Adjustment, Assurance of Payment, The various types of guarantees/ warranties, Concession rights & Obligation) but still could not prevent the problems due to the government breach.

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