# A LEGAL ANALYSIS OF SUCCESSFUL AND PROBLEMATIC BUILD OPERATE AND TRANSFER (BOT) PROJECTS IN MALAYSIA

#### Ruzian Markom\*

Universiti Kebangsaan Malaysia

#### Engku Rabiah Adawiah Engku Ali

International Islamic University of Malaysia

#### ABSTRACT

The Malaysian government has adopted the Build Operate Transfer (BOT) project contractual arrangement for developing public infrastructure projects like highways and railways. In an effort to balance the economic and social needs of the community, the government has introduced a policy and legal framework to address the issue. The aim of this article is to study factors contributing to both successful and problematic BOT projects in Malaysia. The analysis reveals that there are common underlying factors contributing to the success of BOT projects such as: sound policy and regulatory framework, strong government support, clarity of project formulation and documentation, responsible sponsors and fair deals for all parties. On the other hand, the factors contributing to the problematic projects are individualised. Finally, steps to overcome the problems are elucidated to improve the efficiency and effectiveness of both BOT legal technique and privatisation in general.

Keywords: Built Operate Transfer, public infrastructure, policy framework, legal framework

#### 1. INTRODUCTION

Public infrastructure is essential to developing industrial-driven economy. Public Private Partnership (PPP) is one of the legal policies intended to meet the industrial economic need without sacrificing the social needs of the community. Build Operate Transfer (BOT) is one of the legal techniques used in developing public infrastructure projects like toll highways, railways, ports and bridges. The viability of a BOT project to private investors depends, to a large extent, on the way the host government addresses fundamental legal issues such as enforcement of contracts, private ownership, security arrangements, taxes, remittance of foreign exchange and profits. Each aspect is critical to the success of foreign investment in BOT projects. An inadequate legal framework, in particular, can undermine the strength and effectiveness of the various types of contracts that constitute the structure of a BOT project. In a broader sense, a supportive legal framework will reduce what is known as the "country risk,"

Corresponding author: Ruzian Markom, Faculty of Law, Universiti Kebangsaan Malaysia, Bangi, 43600, Selangor, Malaysia. Email: ruzian@ukm.my

a key element in sponsors and lenders appraisal of a BOT project in a developing country (UNIDO, 1996).

Burdened with the task of balancing economic development and meeting the needs of the community, the Malaysian government introduced various legal and non-legal strategies to manage the situation. Legal measures entailed the passing of related legislation. Non-legal measures included formulating guidelines and proper allocation and management of risk.

#### 2. POLICY FRAMEWORK

The Malaysia Incorporated Policy was introduced in 1981 to encourage cooperation between the public and private sectors whereby both sectors act and operate within a "Malaysian Company". Through this policy, both parties depend on each other; the private sector upholds the commercial and economic activities, while the public sector draws up major policies, identifies the direction and provides specialised supporting services necessary for the success of businesses. The Privatisation Policy was launched in 1983 to support the Malaysia Incorporated Policy of increasing the private sector's role in the country's economic development. The main objective of this policy is to lessen the financial and administrative burden of the government, improve skills and production, accelerate economic growth, reduce the size and involvement of the public sector in the economy and to assist in achieving the country's economic policy goal. In line with the implementation of the policy, a Privatisation Section (known then as the Privatisation Special Task Force) was formed by the government under the jurisdiction of the Economic Planning Unit of the Prime Minister's Department. The task force acts as the secretariat to the Privatisation Committee, which in turn is made up of various agencies working towards finalising and confirming proposals on privatisation for cabinet approval.

In 1985 the government produced a Guideline on Privatisation which detailed the objectives of the policy, method of privatisation, as well as the implementation mechanism. (Economic Planning Unit, 1985) In 1991, the government produced a Master Plan on Privatisation to explain the policy and strategy for privatisation. Since the inception of the privatisation program, from 1983 to April 2009, 500 privatised projects have been implemented throughout the country. The Government has benefited from savings in the form of capital expenditure amounting to RM161 billion and annual management expenditure (operations) amounting to RM7.79 billion, an estimated RM194.75 billion in a 25 year period. (BT Times, n.d.) The burden of the government's administrative expenditure was successfully reduced following the privatisation of 58 government agencies. This involved the transfer of 113,440 government employees to the private sector. This savings has enabled the government to redistribute its limited developmental resources to more needy sectors such as the education, health, and poverty eradication programs.

In the current Tenth Malaysia Plan the government's new approach based on the New Economic Model is to further enhance private sector investments in development projects. (Economic Planning Unit, 2010) As such, the government's allocation for development projects will be reduced and it can then shift its attention to projects that will be implemented and funded by the private sector, whether through privatisation and PPP or through direct investment.

The government has also set up a facilitation fund under the Tenth Malaysia Plan in order to support development projects implemented by the private. The public private partnership is materialised through the mechanism of debt, equity, quasi equity and guarantees. The Public Private Partnership Unit of the Prime Minister Department (3PU of the PMD) is the core agency given responsibility to coordinate the Privatisation and the Public-Private Partnership (PPP) projects.

#### 3. LEGAL FRAMEWORK

The Malaysian Government has adopted the legislation specific approach in managing BOT projects. For instance in the road transportation sector, the Federal Roads (Private Management) Act 1984 was enacted to allow the Government to grant to private developers the right to collect tolls on public roads. This Act enabled private developers to construct, operate and maintain new road systems and thereafter recover the costs of doing so through the collection of tolls. Then, in September 1990, the Government of Malaysia enacted the Electricity Supply Act 1990 which started the privatisation of the electricity supply industry. Subsequently, two important regulations were made under the Act; namely the Licensee Supply Regulations 1990, and Electricity Regulations 1994. In addition, the Malaysian Grid Code is being introduced as a set of comprehensive technical and operational requirements for all plants connected to the national grid to ensure safe, secure, reliable and economic electricity supply system, and access to it of all users without discrimination. (Jacob, 1997).

## 3.1. Laws Relating to BOT

The Malaysian government has amended Article 85 of the Federal Constitution which authorised the acquisition of land for the highway projects. In addition, the Federal Roads (Private Management) Act 1984 was passed to enable the private developers to construct, operate and maintain new road systems and collect tolls to recover the cost. Experience has shown that to avoid delays and frustration it is vital to have such public legislation in place before undertaking a BOT project.

Special public legislation establishes a suitable framework to foster competition in areas previously under the exclusive control of the public sector. Such enabling legislation might, for instance, abolish State monopolies and State subsidies so as to make non-subsidised private sector participation in the development of infrastructure projects feasible. For instance, the Electricity Supply Act 1990 was enacted to provide legislative framework for regulating the privatisation of the electricity services.

#### 3.2. Security Legislations

The more traditional forms of security arrangements such as land mortgages or security interests in inventory and equipment are not of much interest to the lenders to a BOT infrastructure project. The lenders rely on project assets (in addition to the project's revenue stream) as security for the debt repayment. Security arrangements tailored to the BOT nature of a project are normally regulated through the project agreement, the purchase agreement, and credit agreement. Such agreements may include offshore revenue and retention accounts,

performance undertakings from the government of the public agency's obligations under the project agreement, assignment of various contracts to the lenders, the lenders' right to cure any defaults by the project company within a reasonable time and their right to take over the BOT project in the case of default. The project company's equity owners also pledge all their stock as security for the loans.

The Contract Act 1950 and the National Land Code legally protect these additional kinds of securities, which are critical to the success of BOT projects as long as the security interest is registered. Some other standard security arrangements found in BOT projects are performance undertaking from the host government of its agencies obligations under the project agreement.

#### 3.3. Foreign Direct Investment Laws

The Malaysian government has enacted foreign investment laws to encourage and facilitate direct foreign investment in BOT infrastructure projects. The foreign direct investment grants a broad range of incentives and benefits to foreign investors taking into consideration the financial characteristics and long-term nature of BOT projects, including foreign exchange convertibility at a reasonable exchange rate.

Among the efforts made by the Malaysian government to improve the business environment for foreign companies include a refined arbitration law, improved measures on the listing of foreign companies and reduced corporate tax rates. (Asialaw, n.d.) The Arbitration Act 2005 which came into effect in March 2006 repeals the Arbitration Act 1952 and brings Malaysia's arbitration regime at par with the international standards. The amendments benefitted the BOT projects proponents as BOT involved multiple players - local and international - and cross border laws.

#### 3.4. Environmental Protection Laws

Environmental issues in BOT project relates to the role of government and issues of sustainability. The Malaysian government enacted the Environmental Quality Act 1974 (EQA) as comprehensive environmental conservation legislation. (Maidin, 2005) The Act is administered by the Department of Environment as the principal agent. Accordingly, The Minister of Science, Technology and Environment, pursuant to the powers conferred on him by EQA 1974, enacted the Environmental Quality (Prescribed Activities) Environmental Impact Assessment Order 1987 that came into effect in 1988. The Environmental Impact Assessment (EIA) process will enable the decision makers to assess the impact of a proposed development project on the environment and the mitigating measures to reduce the risk and impact of such process on the environment. The EIA process is intended to influence the decision maker in deciding whether or not a land development project should be permitted based on the information supplied by the project manager seeking to obtain permission for a BOT project. Besides, it also provides an avenue for public participation in the decision making process. As a result, the EIA process served as a mechanism for implementing sustainable development by assisting decision makers to ensure quality of development, the effect on natural resources as well as the location and size of the project.

#### 3.5. Risk Allocation and Management

One of the crucial factors contributing to the success of BOT projects is proper allocation and management of risk. A proper risk structure is essential in ensuring the success of a project. (Sapte, 1997) Risks are circumstances related with the implementation of a specific project that have the potential to adversely affect the development of the project or the interests of stakeholders/parties. The identification of risk involves the whole process of BOT: the preliminary stage, the construction, the operation, and the termination of the project. Among the specific categories of risk are revenue risk, design risk, construction risk, operating risk, financial risk, political risk, legal risk, environmental risk, and *force majeure* risk (Joshi, 2001).

Once the risk is identified in the specific sectors, the risks need to be allocated to the relevant parties. The allocation of risk is based on the principle of "risk should be allocated, by contract or otherwise, to the party that is best able to mitigate or control such risk." The principle is that risk needs to be allocated and shared among the contracting parties. The allocation of risk is done by way of contract or other risk mitigation techniques including risk management. Risk management is a branch of applied economics with the main aim of minimising the costs of risks and preventing loss of control and financing (Khan and Parra, 2003). Risk management is essential for the success of BOT projects and the parties' tacit recognition of the uncertainties that exists in the project. It also generates structured feedbacks to risks in terms of alternative plans, solutions and contingencies (Merna and Njiru, 2002).

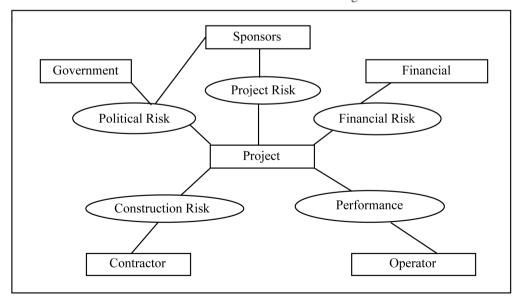


Table 1: BOT Risk Allocation and Management

Sources: Asian Development Bank, Second Workshop on Economic Cooperation in Central Asia Challenges and Opportunities in Energy, Asian Development Bank, 1999 at 144

Table 1 shows the types of risk allocated to and shared among the Project Company with all parties. Political risk is borne by the Government. Only the 'sovereign risks' are assumed by the project company and often mitigated by guarantee such as Multilateral Investment Guarantee Agency (MIGA) (Khan and Parra, 2003) Nevertheless, project risk is mostly held by the project Company and the Sponsors in ensuring the completion of the projects. Company shared the financial risk with the Financial Institutions. In mitigating the financial risks, the bank ensured that the project is "bankable." Among the general guidelines for evaluating the "bankability" of a BOT project is clear and sound legal basis for award of concession to project company by the Government and fairly equitable terms in concession agreement. Construction risk is shared among the Project Company with the Contractor. Finally, the performance risk is shared between the Project Company and the Operator of the completed project.

#### 4. SUCCESSFUL BOT PROJECTS IN MALAYSIA

In general, BOT projects have significantly contributed to the economic development of Malaysia. (Ministry of Transport, n.d.) This is evidenced by many completed BOT projects like toll highways, ports, and railways. The completed infrastructure boosts the economy by providing good transportation facilities for the public in general and industrial sector in particular. The BOT projects analysed below were adopted from the list of the World Bank and Public–Private Infrastructure Advisory Facility, Public Private Infrastructure Project Database from the year 1990 until 2009. The World Bank Database referred BOT projects as a kind of Greenfield projects which refer to new projects (World Bank, 2009).

#### 4.1. Projek Lebuhraya Utara Selatan (PLUS)

The first BOT project in Malaysia was PLUS highway project. PLUS has taken over the highway project since 1988 and completed it in 1994. The project was completed 15 months ahead of schedule. The concession period was extended from 33 years by additional 12 years until the year 2030 according to the toll payment restructuring. The highway with the length of 848 kilometers from Bukit Kayu Hitam to Johor Bahru has nearly halved the travel time from 15 hours to 8 hours. Furthermore, the highway is the catalyst to the economy by connecting the important cities in West Malaysia and encouraging the development of new cities such as Bandar Baru Nilai and Bandar Baru Bukit Merah. The passengers have benefited from the infrastructure by experiencing safe and comfortable journey.

The PLUS case is an example of an adequate legal framework which has ensured the achievement of both the government and private sector infrastructure projects. The rights and responsibilities of all the parties are protected by the law. In the case of PLUS, the Government utilized BOT technique as a form of public private partnership. Therefore, the government has amended Article 86 of the Federal Constitution to ensure the legality and permissibility on the grant of concession for the infrastructure of highways and amended the Land Acquisition Act 1960 [Act 486] to facilitate the acquisition of land for the construction of highways. In addition, there were clear indications that the PLUS privatisation has led to increased efficiency in the transportation system. The privatisation of highways has often resulted in faster rate of highway construction in the country and thereby helps to reduce infrastructure bottlenecks.

The privatisation of infrastructure projects has enabled many of these projects to be completed earlier than if they were implemented by the government (Sulaiman, 1993).

The PLUS project also known as North South Expressway (NSE) was the largest BOT project in Asia (Fisher & Babbar, .n.d.) On 18 March 1988, the government of Malaysia granted 30 years concession contract to the United Engineers (Malaysia) Berhad (UEM) to finance, design, construct, operate and maintain the NSE. On 20 July 1988, UEM, PLUS (a wholly owned subsidiary of UEM) and the Government entered into a Novation Agreement. A Novation Agreement is a document which transferred all UEM rights, obligations and liabilities under the Concession Agreements to PLUS. The toll roads comprise of NSE (797km), the New Klang Valley Expressway (35km), and a 16km Federal Highway Route 2 connecting the industrial and urban areas of Subang and Klang. PLUS's principal activity is to construct, operate and maintain the toll revenue generating Expressway in Malaysia and in addition design, construct, manage, operate and maintain, pursuant to the Concession Agreement, certain Ancillary Facilities such as the rest and service areas along the NSE.

In consequences of the toll rate restructuring in March 1999 and PLUS indebtedness restructuring in September 1999, the Concession Period was extended 12 years beyond its original expiration date to 31 May 2030. In addition, PLUS became obliged to share a portion of toll revenue with the Government. Paradoxically, the PLUS project received high levels of government support in various forms. The single reason may be the government believes that extensive government support is required to attract financing due to the sheer size (estimated total cost of \$3.2 billion) and the risks associated with large projects. Besides, the close connection between the concessionaire and Malaysia's leading political party also may have contributed to the high level of support.

#### 4.2. Lekir Bulk Terminal (LBT)

The Lekir Bulk Terminal (LBT) is part of Lumut Port. (Lumut Port, n.d.) It deals with the promotion and development of a very deep water bulk (Container) terminal, complementary in nature to Lumut Maritime Terminal and the Lekir Coastal project. The project began in 1993 as a privatisation project by the State Government of Perak. It utilises the BOT project mechanism. It was the first of its kind in Malaysia considered as a Greenfield ports and private sector development that received no government funding. The founding promoters of LBT were Perak Corporation Berhad, a public company listed on the Bursa Malaysia whose largest shareholder is Perak State Development Corporation, Halim Rasip Holdings Sdn Bhd and Malakoff Berhad. The current shareholders of LBT are Integrax Berhad (80% of ownership) and Malakoff Berhad (20% of ownership). The concession period is for 20 years started from 1993 until 2013. LBT is a success due to the sound policy, institutional and regulatory framework by the Government in promoting world-class services intra - ASEAN and intra-Asian trade. The Government is committed to provide seamless and efficient maritime cargo transportation infrastructures and services, as articulated in its Strategic Pelan 2008-2015, as a means to enhance Malaysia's competitiveness. (Minister of Transport Malaysia, 2011). LBT, Integrax and Malakoff have been effective as promoters in developing the project and ensuring the profitability of the projects. LBT began with the execution of Jetty Terminal Usage Agreement with Tenaga Nasional Berhad (TNB) Janamanjung Sdn Bhd in August 1999 for the provision of coal unloading and delivery services to Power Station, thus securing an anchor customer. The project then commenced securing an anchor customer with the construction of Phase 1 of the dry bulk terminal in May 2000, comprising of berths able to accommodate Capemax and Panamax vessels with water depths alongside of 20m Atlantic Catch Data (ACD) a 2000m treatise, 2 grab discharge cranes, merchandised handling equipment and controls and appropriate onshore support facilities.

## 4.3. Shah Alam Expressway (SAE)

The Shah Alam Expressway is part of a comprehensive network of road links in the Klang Valley, Malaysia. The 34.5 km expressway connects from Pandamaran in Klang, Selangor to Sri Petaling, Kuala Lumpur. The construction of Shah Alam Expressway began on 1993 when the existing Federal Highway regularly suffered traffic gridlock during Kuala Lumpur to Shah Alam or alternate rush hour traffic. The construction began in 1994 with Kesas Sdn Bhd as the Project Company. The concession was granted by Federal Government to Kesas Sdn Bhd for 25 years began from 1995 until 2019. The Sponsors were Arab Malaysian Berhad and Gamuda Berhad.

Sound policy and supportive regulatory framework like the Federal Roads (Private Management) Act 1984 (Act 306) are vital factors in ensuring the success of SAE. Among the factors contributed to the success of SAE is the credibility of KESAS management. KESAS is managed by highly skilled, experienced and professional personal who are trained in various disciplines like management and transportation. It has a proven track record for the BOT of SAE and was accredited and awarded the prestigious ISO 9002: 1994 quality management system on 1 February 2000 for the management and operations of the SAE. The certification was upgraded to MS ISO 9001:2000 on 1 February 2004.

## 4.4. Tanjung Pelepas Port (TPP)

The Tanjung Pelepas Port (TPP) is situated at the mouth of the River Pulai in south west Johor. (Tanjung Pelepas, n.d.) It labeled itself as the "container port of the future." The future is 20 years into the next millennium as this port infrastructure is planned five phases of development and the final completion is in 2020. Phase 1 began on 1 January 2000 to built six wharfs with the length of 2.16 km at a cost of RM2.85 billion. The second phase involved the construction of two wharfs with the length of 720 metres and would cost RM192 billion. The Tanjung Pelepas Sdn Bhd is a wholly owned subsidiary of Seaport Terminal (Johore) Sdn Bhd. On March 1995, Seaport Terminal entered into BOT agreement with the Malaysian Government and the Johor Port Authority for 30 years until the year 2025. The Sponsors for the project are AP Moller – Maersk Group and Seaport Terminal (Johore) Sdn Bhd.

Two of the major factors contributing to Tanjung Pelepas Port project viability, first is its strategic location of the Port at the mouth of the River Pulai in south west Johor known as the "container port of the future." The second factor is its long term viability which may stretches until 20 years in the future. The port infrastructure is planned in five phases of development and final completion could stretch into the year 2020. To meet future needs of super large ships, the first phase of the port of development has been designed with 2.16 km linear berths, 115 ha container yards, super large port shipment and sophisticated IT-driven port management.

## 4.5. East Coast Expressway

The East Coast Expressway is an expressway in Malaysia. It is an extension of Kuala Lumpur – Karak Expressway, which starts from Kuala Lumpur and extends to Karak. It provides a link from the West Coast of peninsular Malaysia to the East Coast of peninsular Malaysia. It features a closed toll system like North South Expressway. The expressway passes through 3 states on the Peninsular: Selangor, Pahang and Terengganu. Projek Lebuhraya Timur Sdn Bhd (Pelita) holds the concession for 33 years from the year 2000 until 2033. The Sponsor of the project are Malaysia Mining Corporation (40% ownership), MTD Capital Bhd Group (30% ownership) and United Engineers (Malaysia) Berhad (30% ownership). The project is a success due to the fact that it is a component of mega projects of national economic corridors. The highway is the nexus of road network for the East Coast Economic Region (ECER). The project possesses high socio-economic benefits for the three states of Kelantan, Terengganu and Pahang corresponding to the highway.

## 4.6. Tun Salahuddin Bridge

Tun Salahuddin Bridge is the first and the only toll bridge expressway in Kuching city, Sarawak. (Tun Salahuddin Bridge, n.d.) Zecon Toll Concessionaires Sdn Bhd was awarded the concession by the Sarawak State Government to build operate and transfer the project began from the year 2003 until 2036. The cost of the project was RM136 billion. The project managed to be completed due to sound policy and regulatory framework with strong government support. The time length of the journey of the population of Kuching across the Sarawak River was significantly shortened very much to the convenience of the public.

#### 4.7. Johor Eastern Dispersal Link Expressway (EDL Expressway)

In 2007, Malaysian Resources Corporation Berhad (MRCB) was granted a 34 concession deal to build, operate and transfer the Eastern Dispersal Link (EDL) expressway in Johor for the cost of RM977 million. (New Straits Times, 2007) The EDL is about 8.1 km in length and is an open toll system with a dual three-lane carriageway providing direct link between the new Customs, Immigration and Quarantine (CIQ) complex in Tanjung Puteri and the North South Expressway using the Pandan interchange in Johor Bahru. The EDL project is undertaken by MRCB's wholly –owned MRCB Lingkaran Selatan Sdn Bhd. The scope of the project includes upgrading existing city roads and several intersecting roadways including Jalan Biru, Jalan Stulang Laut and Jalan Sultanah Aminah. The EDL project eliminates the traffic congestion in Johor Bahru and the surrounding area including the Iskandar Malaysia. High commitment of the local sponsors and foreign investor confidence contribute enormously in the development of the mega project.

The above projects shows that a successful BOT project must fulfill three conditions, namely; the project must be privately profitable, must meet the developmental objectives of the government and must satisfy consumers of the service. In addition, the partnership between experienced foreign and Malaysia companies contributed to the success of a particular BOT project.

#### 5. FACTORS CONTRIBUTING TO A SUCCESSFUL BOT

The aforementioned analyses have shown that there are common underlying factors contributing to the success of BOT projects. The following discussion will elaborate in detail the contributing factors of successful projects:

## 5.1. Sound Policy and Regulatory Framework

Sound policy and comprehensive regulatory framework contributes vastly to the successful of a particular BOT project. (Delmon, 2000) For instance, in the case of PLUS, the first step that the government has taken in ensuring the legality and permissibility on the grant of concession for the infrastructure of highways is the amendment of Article 86 of the Federal Constitution. This was followed by the amendment to the Land Acquisition Act since highway construction involved land acquisitions. The privatisation policy transfers the responsibility in the form of award of concession and constructions contract to the private developers to construct, maintain and operate infrastructure projects. Therefore, the Federal Roads (Private Management) Act 1984 was enacted to authorize the Government to grant private developers the right to collect tolls on public roads. This Act permits private developers to construct, operate and maintain new road systems and recover the cost through the collection of tolls. Similar facility was granted to the development of ports whereby Ports (Privatisation) Act was enacted in 1990 to allow the transfer of port undertakings.

## 5.2. Strong Government Support

The government is the client; it is in the government interest to facilitate the process. Any emerging problems related to the project cannot simply be handed to the private sector. BOTs are a partnership between the private sector and the public sector. (Iqbal & Khan, 2004) As in any partnership both parties must play active roles in ensuring the success of the project. In the case of ERLSB railway project, the strategic partnership between the Government and the private had resulted in the completion of the project. In dealing with BOT projects, the Malaysian government has adopted the principle of real priority project which focused on highly need public projects. The construction of highways is a good example of real priority project. Highways provide transportation means to the public. Good transportation encourages the increase in industrial production. Some examples of real priority projects are PLUS, SPRINT and KESAS.

#### 5.3. Clarity of project formulation and documentation

The project formulation and documentation have to be as clear as possible. Some countries opt for standard documents given to all parties involved in the project. In some cases this strategy works, but at other times it causes headaches because every project is different. A perfect standard document has to be adopted for every single project. Whatever be the case, the documents have to be clear and transparent. In Malaysian environment, this is essentially monitored by the Economic Planning Unit of the Prime Ministers Department which responsible for the preparation of the Concession Agreement of every project. Nevertheless, since 2009, the responsibility was transferred to the Public Private Partnership Unit of the Prime Ministers Department (3 PU) to monitor the proposal of a particular project until its

completion. Every stage of the BOT process must be carried out in a transparent manner. The selection of concessionaire must be conducted in open tender. Besides, the evaluation and appraisal of the project should be made transparent to all parties. In ensuring the transparency of the whole process, the 3P Unit of the Prime Ministers Department had issued Public Private Partnership Guidelines. The Guidelines provide framework, important criteria and the flow of the process of the PPP Projects. Sustainability is an element of profitability and a potential factor to problematic projects. The government may not be able to sustain the hidden cost due to its reliance on heavy subsidies. Long term project as the Tanjong Pelepas Port with phases of development to be world class port by 2015 is seen as highly viable.

## 5.4. Responsible sponsors

Governments should deal with responsible sponsor. A responsible sponsor means the investors/promoters know what they are doing and have long-term commitment to the project. For instance, YTL group as one of the responsible stakeholder in enabling the success of ERLSB project. (Siemens, n.d.).

## 5.5. Fair deal for all parties

This is the most important of all the factors that contributed to the successful of a BOT project. Fair deal connotes the project will benefit all parties to the BOT projects including the endusers. A good example is the highway projects, by outsourcing the projects to the private entity, the Government shall concentrate on social development such as eradicating poverty programs and increasing educational facilities to the public.

## 6. PROBLEMATIC BOT PROJECTS IN MALAYSIA

Although the BOT programs benefited the public and the state, there were few problematic projects in terms of financial and management. Among the projects that were taken over by the government including railways and highways as follows:

#### 6.1. Sistem Transit Aliran Ringan Sdn Bhd (STAR -LRT)

STAR, the first private owned *Light Rail Transit* (LRT) company, formed in 1991 to build, own and operate one of the three LRT systems in the Federal Territory of Kuala Lumpur for 60 years. There were two phases of construction; the first phase STAR concession agreement was signed on the 22 of December 1992 while the second phase on the 7 of August 1995. Construction started in 1994. Both phases were completed for less than RM3.5 billion budgeted, with first phase launched in December 1996 and phase two in July 1998 (Wong, Jomo & Chin, 2005). The concession period for both agreements was 60 years renewed every 30 years.

### 6.2. Projek Usahasama Transit Aliran Ringan Automatik Sdn Bhd (PUTRA)

Projek Usahasama Transit Aliran Ringan Automatik Sdn Bhd (PUTRA) was incorporated in Malaysia on 15 February 1994. The principal activities of PUTRA were to design, construct, finance, operate and maintain the LRT system and ancillary activities. PUTRA began revenue services as opposed to free trial runs in September 1998, while the city section opened in June 1999. It now operates the longest line (29km), with a fully automated LRT system.

# 6.3. Among the problems faced by railways projects were:

a) The real number of passengers was far lower than expectations. This affected the ability of the company to generate cash flow sufficient to meet debt service and other obligations.

Project	Years Estimation Was Made	Year	Estimated Number of Users Per day	Total Average Daily Users
STAR	1995	1999 2003 2004*	586.091 659,688 668,986	62,547 107,082 117,357
PUTRA	1995	1999 2003 2004*	245,666 419,225 440,438	12,741 154,869 155,487

Table 2: Estimation Number of Consumers Using the Selected Project

Notes: \* Until August 2004

Table 2 shows the number of passengers using the services and facilities of the STAR and PUTRA were far more lower than the original estimates. As a result, both projects were handed over to the government and categorized as problematic projects.

- b) The original fare rate was fixed to get the expected return. Nevertheless, the rate was too high and affected the number of passengers. Therefore, the Government required STAR and LRT to reduce the fare cost to avoid the continuous decrease in the number of passengers. The reduced fare was able to increase the number of passengers but the company still did not achieve its expected income;
- c) The high cost of construction for STAR (RM3.3 billion) and PUTRA (RM5.4 billion) with the big amount of commercial loan was one of the factors for both projects facing financial problems. Besides, both projects used imported high technology component;
- d) Less integration and connectivity between the LRT and other modes of public transport especially buses and taxis was also responsible for low traffic. The feeder bus services are not inclusive and did not satisfy the passengers need. They find difficulties to continue their journey from or to the station. Besides, physical integration between LRT station and other transportation facilities like commuter station is limited; and
- e) Limited parking facilities at the LRT station made it difficult for the passengers to use the service.

## 6.4. Kulim-Butterworth Highway

In March 2008, a 30 year BOT contract for Kulim-Butterworth Highway was cancelled. This is due to the fact that the project company, Konsortium Lebuhraya Butterworth-Kulim (KLBK), was purchased by the state-owned enterprise, PLUS Expressways Berhad (PEB).

# 6.5. Guthrie Corridor Expressway (GCE)

In the year 2000, Guthrie Corridor Expressway Sdn. Bhd. was awarded concession of 33 years, to build operate and transfer a 25km GCE from Shah Alam to the northern states. In 2006, the Kumpulan Guthrie Berhad has agreed to sell GCE to Projek Lintasan Kota Holdings Sdn. Bhd. (Prolintas) for RM936 million in cash and loan stocks. Prolintas is 100% owned by Permodalan Nasional Berhad.

# 6.6. Among the problems faced by highways including both projects were:

- a) The processing period of project proposal is usually a complicated and long drawn process. It involves series of negotiations between the government and the private sector as follows:
  - i. negotiations to finalize the technical aspects and project costs to ensure suitability and safety of design and reasonable price to get value for money returns for infrastructural construction and Government facilities;
  - ii. Negotiations to finalize the conditions and terms of the contract based on the scope and specifications of the privatised projects. The process needs detail understanding of the clauses in the contract to ensure Government benefits is protected without affecting the development of the project so that all parties benefited the implementation of the project by win-win situation;
  - iii. due diligence and public opinion study on the feasibility of the project is a precondition before the negotiation of terms and conditions of a privatized project, and
  - iv. economic downturn in June 1997 effected the development of construction projects. Many privatisation projects which were agreed in principle faced financing problems. The situation has caused them to renegotiate the condition and terms of the contract and request for extension of implementation.

Besides, parts of the project operated by the government or the states were implemented without referring to the Privatisation Committee, Economic Planning Unit, Prime Minister Office. They were referred only after the agencies faced difficulties. Nevertheless, the problem is difficult to be solved because the committee was not involved from the beginning.

b) The privatisation programs applied the basic principle of risk and reward. In the context of privatisation, the company carried the risk related to the project in terms

of financing cost, construction cost and income to be collected. In return of the risk, the company is given reward as agreed and stated in the concession contract. Therefore, if the project is facing difficulties, usually the problem is related to the failure to identify the risk in depth and distribution of risk in optimum or failure to grant sufficient reward to the company.

c) In the gestation stage, the financial evaluation of a project includes three important components namely the cost, estimation of traffic and charges or tariff for every services provided. The components are interrelated and important for the cash flow and development of the project. The most commented issue was the high cost of the project. This is because the cost of the project was determined by the original cost of providing the facilities or services. For infrastructure projects, the capital cost was based on the technical needs and design according to the specification and supporting facilities. On the other hand, for services project, besides technical needs, services level and level of performance influence the cost of the services. The related issue to the cost was the risk to the company in the zevent increased cost of materials for the project during the period of construction which indirectly affected the total cost of the project. Cost over-run happened because of many factors like the tight financial condition, increased in the foreign exchange, changed of government policy during the implementation of the project and the problem of delay of the government grant. For example, the Project Lebuhraya Bertingkat Ampang (PROLINTAS) suffered cost over-run due to the increase cost of the land swapping from RM94 million to RM140 million. This was due to the Government decision in taking over the whole land lots involved in the project. This was to avoid unused lots from being uneconomically developed.

In practice, estimation of traffic for a project is done based on the parameters and assumptions related to the project. For instance, estimation of traffic for highway project was done based on the number of population and drivers surrounding the project area who will use the proposed highways. Issues arise when there are changes in the original parameters like the economic downturn in 1997-1998. The changed situation affected the original estimates and had impact on the financial viability of the project.

The determination of charges and tariff of a project or facilities consider the cost of capital and operation, reasonable cost of financing and return to the investors. One of interesting principle in fixing the charges or tariff was the charges or tariff is not bound consumer pricing index and other increase of charges or tariff subjected to the permission from the Government. Meanwhile, the charges suggested by the government are based on the full-cost recovery tariff (FCR). The usual practice was that the tariff will increase every five years according to the concession agreement. Problem arises when the likelihood of the consumer accepting the FCR tariff is very low. Most of the consumers assumed the tariff is too high and beyond their means. In relation to that, the Government gives financial assistance or support in the form of subsidies direct to the consumers. Due to lower charges or tariff imposed to the consumer, the project suffers failure and the government has to bail out and take over the project.

In general, the increase of toll charges for highway is under control. For some of the projects, toll rates were restructured to reduce the charges and the frequency of toll increased as implemented on PLUS. The impediments in toll increasing according to the contract have caused the Government to pay compensation to the concessionaire. Until December 2003, the total of compensation paid to the concessionaire other than PLUS Bhd is RM2.93 billion. For PLUS Bhd, the overall compensation paid including tax incentives is RM36 billion.

d) Failure of the commissions to carry out its responsibility. 18 commissions were established to monitor and evaluate continuously the private agencies in relation to prices, standards, and services qualities to protect the consumer.

Nevertheless, the commission failed to carry out its responsibilities effectively. The main reasons were lack of expertise and not having adequate staff with relevant expertise. Currently, the function of the commission is concentrated on the technical monitoring aspect and safety and less on competition watch, services quality and tariff that will directly affected the consumers.

Due to the above weaknesses, few steps were taken to restructure the commission based on sector like in Table 3

**Table 3:** Restructuring of Commissions

Commissions	Sectors		
Communication and Multimedia	Broadcasting, communication and multimedia		
Energy	Electric and gas		
Public Facilities	Highway Tolls and Building Maintenance		
Sanitation	Sewerage Services		
Water	Water Services		
Ports	All Ports		

Sources: Economic Planning Unit, Jabatan Perdana Menteri Malaysia

e) The principle of real priority project was adopted during the early implementation of the privatisation policy to attract private sectors. However, the Technical Committee which evaluates the cost of the project, selection of companies based on this principle had problems with cost comparison as there was no benchmarking to determine the fairness of the project cost proposed. Due to that, some projects which the Government has no expertise, need input from foreign consultants and used imported components and escalated beyond the estimation of the project cost.

#### 7. SUGGESTIONS TO OVERCOME WEAKNESSES

In order to improve the efficiency and effectiveness of the BOT legal mechanism in particular and generally the privatisation policy, the Government has taken few steps:

# 7.1. Improve and Strengthen the Conditions and Terms of the Contract

The conditions and terms of the contract need improvement especially in relation to the company responsibility in guaranteeing project completion, building design and facilities and the procedures relating to it. Similarly, the inclusion of the condition on Step-in Right to enable the Government to take over the operation of the company, while the company settles its problem, so that the service continues without a break.

Accordingly, few conditions and terms of the concession contract need further research and renegotiations in protecting the interest of the parties. Among the important aspects that need consideration are as follows:-

- Exclusive right
- It should be reconsidered to avoid services monopoly and create a healthy competition among the companies which will benefit the Government and the public;
- Government Guarantee to the Companies and the Borrower
- The clause need to be reconsidered to avoid unnecessary financial burden to the Government like payment of level of indebtedness and compensation to the concessionaire if the Estimated Return, Profit and Traffic Volume for certain year is not achieved;
- Right to Terminate the Contract/Concession
- Form clause regarding the right to terminate the contract or concession by the Government if the company failed to fulfill the conditions and terms of the contract according to the agreed project standard;

The condition on equity holder by stating that any changes to the structure and equity holders of the company must obtain the permission from the Government through Economic Planning Unit (EPU).

- Additional conditions to the Condition Precedent of the Company includes:
- appoint an independent consultant to conduct the public survey on the project before the negotiation of the conditions and terms of the contract; and
- form a Joint-Venture Agreement between the consortium shareholders before the signing of the contract.

# 7.2. Review Tariff and Toll Charges Mechanism

Re-evaluate the toll charges or tariff and services fees to ensure that the fees did not burden the Government and the public without affected the viability and sustainable of the project. The Government also needs to consider that the public should not be over burdened by the increase of toll fees.

# 7.3. Enhance Quality Assurance and Standards

In enhancing the quality assurance and standards of a particular project, the Government need to revise the Concession Agreement by including the clauses on design guarantee. The responsible Government agency like the Public Private Participation Unit (UKAS) in Malaysia has the Key Performance Indicators for every project to relate the charges and services with the performance of the company.

#### 8. CONCLUSION

The success of BOT projects depends on the sound privatisation policy and adequate legal framework which protect the parties. Strong government support is the added value to maintain the flourishing of BOT projects. The Malaysian experience indicates that BOT projects deals with real priority projects like toll highways, ports and railways. Although many BOT projects were completed, few projects were taken over by the Government owing to problems posed in administration. The problematic BOT projects reveal that there are issues of lack of transparency in the projects' procurement process, inadequate project appraisal and unclear concession agreement terms and conditions. It is recommended that the terms and conditions of the concession agreement should be improved to be fair and equitable to all parties. Besides, the tariff and toll charges mechanism should be reviewed to be fair to the end users. Finally, the quality assurance and standard clauses should be enhanced in protecting the interest of all parties to the contract.

#### REFERENCES

- Asialaw. (n.d.). New Laws to Attract Foreign Investment. Retrieved from http://www.asialaw.com/Article/1971258/New- Laws-to-Attract-Foreign-Investment.htm
- BT Times. (n.d.). Proposed RM31.4b merger gets lukewarm response from analysts. Retrieved from http://group.yahoo.com/group/beritamalaysia/message/90482.
- Delmon, J. (2000). BOO/BOT projects: a commercial and contractual guide. London: Sweet & Maxwell.
- Economic Planning Unit (1985). *Guidelines on Privatisation*. Kuala Lumpur: Prime Ministers Department.
- Economic Planning Unit (2010). Tenth Malaysia Plan, 2011-2010. Kuala Lumpur: Percetakan Negara
- Fisher, G. & Babbar, S. (n.d). Private Financing of Toll Roads. *RMC Discussion Paper Series* 117, World Bank.

- Iqbal, M. & Khan, T. (2004). Financing public expenditure: an Islamic perspective. Occasional paper. Jeddah: IRTI.
- Jacob, F. X. (1997). Privatisation and regulation in Malaysia's power sector. *Energy For Sustainable Development*, Vol. 111 No.6, March, 83.
- Joshi, P. (2001). Law Relating to Infrastructure Projects. New Delhi: Butterworths.
- Khan, F. K. & Parra, R. J. (2003). *Financing Large Projects Using Project Finance Techniques and Practices*. Singapore: Pearson.
- Lumut Port. (n.d.) Retrieved from http://www.lumutport.com.
- Maidin, A. J. (2005). Challenges in Implementing and Enforcing Environmental Protection Measures in Malaysia. Working Paper presented at the 13<sup>th</sup> Malaysian Law Conference, 17<sup>th</sup> November 2005, Kuala Lumpur.
- Merna, T. & Njiru, C. (2002) *Financing Infrastructure Project*, London: Thomas Telford Publishing.
- Ministry of Transport. (n.d.) Speech by the Minister of Transport, "Significant Contribution by Transport Sector Towards Malaysia's Economic Strong Growth in 2<sup>nd</sup> Quart". Retrieved from http://www.mot.gov.my
- New Straits Times. (2007). MRCB adds Johor highway deal to portfolio. Retrieved from http://findarticles.com/p/news- articles/new-straits-times/mi\_8016/is\_20070627/mrcb-a
- Sapte, W. (1997). *Project finance the guide to financing build-operate-transfer projects uses in PPP*. London: Euromoney Books.
- Siemens. (n.d.) Express Rail Link Kuala Lumpur Turnkey Project Pamphlet.
- Sulaiman, A. A. H. (1993). The Role of The Government In A Privatisation Exercise Pre and Post Privatisation. Working paper presented in the National Conference Privatisation: The Challenges Ahead, 7th October 1993, The Regent Kuala Lumpur.
- Tanjung Pelepas Port. (n.d.) Retrieved from http://mcleon.tripod.com/pelepas/pelepas.htm.
- Tun Salahuddin Bridge. (n.d.) Retrieved from http://ww.zecon.com.my/completed\_projects/tun-salahuddin bridge/
- United Nations Industrial Development Organization (UNIDO). (1996). Guidelines for infrastructure development through build-operate-transfer (BOT) projects. Vienna: UNIDO.
- Wong, S. C, Jomo K. S. & Chin, K.F. (2005). *Malaysian "Bail Outs"? Capital Controls, Restructuring and Recovery*. Singapore: Singapore University Press.
- World Bank. (2009). Private Participation in Infrastructure Database of the World Bank. Retrieved at http://data.worldbank.org.