JAPAN
BANK FOR
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JBIC

JBICI Research Paper No. 34

Report on Infrastructure Financing and Bond Issuance in Malaysia

April 2007

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Foreword

One of the important policy agenda for the East Asian countries to sustain their steady economic growth is how to efficiently and effectively develop infrastructure such as power, transportation, water sewage, and telecommunication. The JBIC-ADB-World Bank joint research entitled "Connecting East Asia: A New Framework for Infrastructure" indicated that, while stressing the important role of central government, private sector's infrastructure investment and utilization of domestic capital market could be explored to meet the enormous infrastructure demand being estimated at over US$ 200 billion annually.

Meanwhile, learning from the lessons of the Asian financial crisis in 1997, East Asian countries recognized the importance of developing the bond market in the region so as to alleviate the currency and maturity mismatches in financing and to facilitate the use of Asia's high savings for investments in Asia. JBIC has actively contributed to the Asian Bond Markets Initiative (ABMI), undertakings under ASEAN+3 Finance Ministers Process, by issuing local currency denominated bond and extending guarantee to the local currency denominated bond issued by Japanese subsidiaries in East Asia.

Given the nature of private infrastructure projects that normally require large scale and long-term financing in local currencies, attention has been recently paid to the "infrastructure bond" that securitizes future cash flows from infrastructure projects as a promising product in local currency bond markets in Asia as well as a means of private infrastructure financing. In fact, some of the East Asian countries such as Malaysia, Korea and Hong Kong have already embarked on utilizing the infrastructure bond product.

This research paper aims to unveil the snapshot of infrastructure bond market in Malaysia (including government policy, legal and regulatory framework, major investors, and risk mitigation mechanisms) and the challenges for its market development perceived by the market participants, and to make a policy recommendation, so that the infrastructure bond market could be further developed in East Asia. We hope that this research paper would be of any help to deepen the deliberation on the development of bond markets as well as infrastructure in Asia.

Last but not least, we would like to express our sincere gratitude to those people from the relevant organizations both in Japan and abroad for their extensive support and cooperation rendered to us in conducting this research.

April 2007

Izumi Arai
Executive Director
JBIC Institute

《Research promoters from JBIC》

Satoshi Nakagawa,	Task Leader, ABMI Task Force, Japan Bank for International Cooperation
Suk Hyun,	Bond Market Specialist, ABMI Task Force, Japan Bank for International Cooperation

《Authors of the research paper》

RAM Economics Research

Dr. Yeah Kim Leng,	Group Chief Economist
Ms. Kristina Fong,	Economist & Researcher
Mr. Fazlee Sulaiman,	Economist & Researcher

Preface

Malaysia's economic progress and achievements over the past four decades have been accompanied by a considerable amount of investment in physical infrastructure development. Notably, the Government has been instrumental in the infrastructure build-up encompassing air and sea ports, highways, power, water and sewerage. This can be seen by the high public expenditure for this sector amounting to a total of RM98.8 billion during 1986-2005 period. Complementing the high public expenditure was the country's large scale privatization programme that resulted in the private sector undertaking major infrastructure construction projects and provision of infrastructure services. Between 1990 and 2005, a total of RM150.3 billion was invested in infrastructure projects with private sector participation. Of this total, 29.8% or RM44.8 billion was spent on the energy sector, 17.0% or RM25.6 billion on telecommunications, 30.5% or RM45.8 billion on transport and 22.7% or RM34.1 billion on water and sewerage projects. The bulk of the private sector financing was provided by the domestic bond market and other avenues currently now being pursued through private financing initiatives (PFIs). The total value of bonds issued by the infrastructure sector, amounting to RM108.4 billion, represents a sizeable 72% of the RM150.3 billion invested in infrastructure by the private sector. The purpose of these bond issues include refinancing of existing borrowings, funds raised for working capital purposes and acquisitions of companies. On average, infrastructure bonds accounted for 36% of the total bond issuance between 1993 and 2006.

The changing role of the Public and Private sectors, with the latter shouldering an increasingly significant responsibility, as well as still evolving optimal balance in the distribution of risks between the Pubic and Private sectors has contributed greatly to the country's rapid infrastructure development. A pre-requisite in the successful shift towards private financing is the creation of a sound legal and regulatory environment for the smooth functioning and deepening of the domestic bond market. Equally important, the government has ensured economic viability and stability in the infrastructure services market through off-take arrangements and purchasing agreements such as the power purchase agreements (PPAs) in the electricity sector. The Private sector has also contributed in this respect by incorporating the relevant credit enhancement mechanisms into their financing structures as well as taking the relevant steps to ensure the viability of the projects with respect to the contractors involved, amongst other factors.

Although private financing capabilities, especially the use of the bond market financing, have progressed significantly over the last two decades, the market still faces several constraints and challenges. The short tenure of these infrastructure bonds present in the market has created a mismatch between the length of the projects and the tenure of the financing instruments, which less than ideal for the issuer seeking to lower financing cost over the duration of the concession period. Furthermore, the strong risk aversion among bond investors has caused the pool of investors to be disproportionately dominated by institutional investors who are under regulation to invest in high grade bonds only. This in turn has put additional pressure on project sponsors that do not meet the minimum investment grade to seek other modes of financing, as there is one less avenue to source funding from even though the project may be viable. Other impediments that plague the bond market are more operational in nature such as the closed or negotiated tender process and other issues relating to project viability.

Based on the Malaysian experience on infrastructure financing through the bond market and the shortfalls as mentioned above, future policy initiatives should aim to rectify the credit quality gap between issuers and sellers. These areas encompass:

- the provision of financial guarantee or insurance to enhance the project's credit rating
- extending the tenures of bond instruments to match the longer project or concession period and developing other forms of enhancing the structure of the project financing
- setting up of special institutions or funds that are able to invest in projects that are inherently high risk due to the nature of the industry and the long gestation period characterized by uncertainties in demand or cash flow generation.

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Acronyms and Abbreviations

ABS	Asset-Backed Securities - bonds issued pursuant to a securitisation transaction
ABS IMTN	Asset-Backed Securities - Islamic medium-term notes issued pursuant to a securitisation transaction
ABS(CP)	Asset-Backed Securities - commercial papers issued pursuant to a securitisation transaction
ABSMTN	Asset-Backed Securities - medium-term notes issued pursuant to a securitisation transaction
BNB	Bank Negara Bills issued by Bank Negara Malaysia
BNNN	Bank Negara Negotiable Bills - issued by Bank Negara Malaysia
BONDS	Corporate bonds issued by corporations
BOT	Build, operate and transfer
CA	Concession Agreement
CC	Capacity charges
CAGABAIS	Cagamas Bithaman Ajil Islamic Securities issued by Cagamas Berhad
CAGB	Cagamas Bonds issued by Cagamas Berhad
CAGN	Cagamas Notes issued by Cagamas Berhad
CAGR	Compounded Annual Growth Rate
CP	Commercial Papers issued by corporations
DFI	Development Finance Institution
EOD	Event of default
EPF	Employees Provident Fund
GII	Government Investment Issues issued by the Government of Malaysia
GLC	Government-linked companies or corporations
IABS	Islamic Asset-Backed Securities - Islamic bonds issued pursuant to a securitisation transaction
IBONDS	Islamic Bonds issued by corporations
ICP	Islamic Commercial Papers issued by corporations
ILOANNOTES	Islamic loan Notes issued by corporations
IMTN	Islamic Medium-term Notes issued by corporations
IPP	Independent power producer
KHA	Khazanah Bonds issued by Khazanah Nasional Berhad
LOANNOTES	Loan Notes issued by corporations

LOANSTOCK	Loan Stock issued by corporations
MGS	Malaysian Government Securities issued by the Government of Malaysia
MITB	Islamic Malaysian Treasury Bills issued by the Government of Malaysia
MTB	Malaysian Treasury Bills issued by the Government of Malaysia
MTN	Medium-term Notes issued by corporations
NFPEs	Non-financial public enterprises
PDS	Private debt securities
PPA	Power purchase agreement
SAC	Sanadat ABBA Cagamas issued by Cagamas Berhad
SMC	Sanadat Mudharabah Cagamas issued by Cagamas Berhad
ABS	Asset-Backed Securities - bonds issued pursuant to a securitisation transaction
ABS IMTN	Asset-Backed Securities - Islamic medium-term notes issued pursuant to a securitisation transaction
ABS(CP)	Asset-Backed Securities - commercial papers issued pursuant to a securitisation transaction

Executive Summary

This report on Malaysia's infrastructure projects and the associated use of bonds for financing infrastructure development provides a comprehensive review of infrastructure project financing in Malaysia. It covers the various types of infrastructure projects and the institutional framework, bond financing structures and mechanisms, role of intermediaries, stakeholders, major investors and market environment under which these projects were implemented. Subsequent analysis establishes the gaps prevalent in the Malaysian infrastructure bond market and identifies possible solutions and development lessons which may be helpful to multilateral institutions, development agencies and regulatory authorities in other developing countries facing similar issues and challenges.

Overview of Bond Infrastructure Projects and Bond Issuance in Malaysia

Malaysia has achieved significant progress in developing its physical infrastructure to meet the growing demands arising from rapid industrialization, population growth, urbanization and an increasingly effluent society. Notably, the Government has been very involved in this progress with total spending on infrastructure development (covering transport, communication, energy and water resources sectors) over the twenty-year period from 1986-2005, valued at RM98.8 billion. However, relative to the size of the economy, Malaysia's public spending on infrastructure amounted to 2.0% of GDP over the 1986-2005 period which is lower than the average spending (3.8%) on infrastructure for developing countries, according to World Bank analysis. The relatively low public spending on infrastructure development is due largely to the massive shift to the private sector and much of the success in the country's private financing of infrastructure projects is due to the ability of the project promoters and developers to raise funds in the debt capital market.

On average, infrastructure bonds accounted for 36% of the total bond issuance between 1993 and 2006. The sharp decline in issuance in 1998 and 1999 was caused by the Asian financial crisis. The subsequent strong rise from 2000 onwards was the partly the result of corporate debt restructuring that saw the substitution of short term bank borrowings and bond facilities with long tenured bonds to address the funding and maturity mismatches that contributed to the financial distress of infrastructure companies. It is evident that the bond market is the major provider of funds for infrastructure financing in the private sector. The total value of bonds issued by the infrastructure sector, amounting to RM108.4 billion, represents a sizeable 72% of the RM150.3 billion invested in infrastructure by the private sector. The purpose of these bond issues includes refinancing of existing borrowings, funds raised for working capital purposes and acquisitions of companies.

Public Sector Role in Infrastructure Project Development

The Government first announced privatization as a national policy in 1983. Representing a new approach in the national development policy, it complemented other national policies such as the Malaysia Incorporated policy that were aimed at achieving private sector-led growth of the economy and a reduced financial burden on the Government finances, amongst others.

Privatisation strategies promoted projects that had high multiplier effects and stimulated economic growth, maximizing social welfare at the same time. Furthermore, to facilitate the implementation of privatization programme, the Government amended a number of laws such as the Road Transport Act 1987 which regulated prices charged for Toll Roads.

Government-linked corporations (GLCs) have also become actively involved in infrastructure development in the country either as the main sponsor or off-taker of infrastructure projects. In the power segment, Tenaga Nasional Berhad (TNB) as the national electricity company has entered into Purchasing Power Agreements (PPAs) with the Independent Power Producers (IPPs). Since 2004, the GLCs have undergone a re-vamp and one of the main developments from this plan of action was the placement of 30 GLCs under the management of Khazanah Nasional Bhd which is the investment arm of the Government.

Following two decades of privatization experience, the earlier aggressive policy stance is now moderated by emerging concerns over the costs of privatization and public objections over the manner in which the projects and concessions had been awarded previously. Nevertheless, public entities are expected to remain important players in the financing, development and delivery of infrastructure projects and with the on-going reforms and higher emphasis on efficiency in these organizations, the stability of these entities may prove a way in which Malaysia will be able to access a higher proportion of external financing in these infrastructure projects.

Financing Methods for Infrastructure Projects

Project financing refers to the funding of long-term infrastructure projects usually in the realm of public utilities. Funding is based on a financial composition that involves both equity and debt, structured in a way in which potential cash flow from the project will be used to repay the commitments to the external sources of financing. Special Purpose Vehicles (SPVs) are created for the purpose of the project where assets, along with the revenue generating source are used to secure the project's viability. Financial institutions such as investment banks, trustees and rating agencies form part of the intermediary network that enables this relatively complex financing initiative to come together cohesively.

Project bond financing, in particular has gained prominence as a viable and profitable method for raising project finance since the 1990s, especially after the Asian financial crisis where many affected countries in the region naturally turned to the bond market for financing, given the lack of liquidity in the equity capital market and banking sector in the aftermath of the financial crisis. Banks, however, still remain a major source of financing for large projects, especially in the case of specialized development banks.

Most infrastructure financings in recent years have taken the form of project financing bonds. This is due to the very nature of raising funds for infrastructure where they are project-based (purpose-built asset), centered on a specific activity or objective with a limited project life-span. A distinct feature of a project financing scheme is the 'cash flow ring fencing' arrangement which enables a clear allocation of funds to their specific purpose which acts as a safeguard to satisfy the broad range of project expenses and financing repayments. Another distinguishing characteristic of project financing structures is the stable cash flow requirement, a feature which the Government can play a crucial role particularly in privatized projects.

Numerous 'landmark' deals corresponding to the various segments of the infrastructure sector have been identified and their financing structures and credit enhancing features highlighted. Analysis of these deals leads us to find that as the demand for infrastructure continues to grow in tandem with economic growth, there are certain issues prevailing in infrastructure financing which have limited the amount of investor funds in this segment of financing, ultimately resulting in a mismatch in the supply and demand of funds in the country's financial system; such as under-developed segments (long tenure bonds that match concession period) of the debt capital market and risks pertaining to economic and policy-related uncertainty. Another recurring theme which poses an ongoing challenge to the financing situation in Malaysia is the optimal balance between the public sector and private sector in terms of cost and risk-sharing in the funding arrangement. All these factors above point towards the high importance of having appropriately structured bonds which are critical to the success of raising finance for the respective projects.

Legal and Regulatory Framework Governing the Bond Market

The Malaysian bond market is supervised by two principal regulatory bodies, namely Bank Negara Malaysia (Central Bank of Malaysia) and the Securities Commission (SC).

Bank Negara Malaysia (BNM) regulates the activities of financial institutions via the Banking and Financial Institutions Act of 1989 (BAFIA). It issued the Guidelines on the Issuance of Private Debt Securities in 1989 which established the process, procedures and criteria for any resident company to raise funds from the public. A resident company is free to issue any amount of ringgit PDS. On 1 July 2000, the approving authority for private debt securities (PDS) was transferred from BNM to the SC, pursuant to the Securities Commission Act of 1993 with the power to regulate the issuance of and the dealings in securities, to encourage the development of the securities market, and to curb improper dealings. It also regulates all matters pertaining to unit trusts and takeovers and mergers. The development plan for the Malaysian bond market is spelt out in the Capital Market Masterplan (CMP) released in February 2001. It is a comprehensive plan charting the strategic positioning and future direction of the Malaysian capital market for the next ten years (2001 - 2010) and includes strategies to encourage more private (as well as foreign) investor participation in the bond market.

Investor Profile

The nature of infrastructure project bonds mainly appeals to institutional investors such as the insurance companies, unit trusts and pension funds due to their long-term investment periods that enable these institutions to generate a stream of long-term cash flows consistent with their objectives. Each insurance company has its own policies in terms of how much of its funds (with respect to the stated limit) may be invested in debt. This proportion could range from 10% to 30% in the Malaysian insurance industry.

The Employee's Provident Fund (EPF) remains the largest investor in the market with the majority of funds invested in Malaysian Government Securities (MGS) due to regulatory requirements. It has a sizeable investment portfolio in bonds and loans (especially in the infrastructure sector), amounting to RM100.7 billion as at the end of February 2007.

One dominant feature of the profile of investors in the Malaysian bond market is their risk adverse attitude towards investment. This is exhibited by the fact that investors are very reluctant to invest in bonds that have long-term ratings below single A. Thus high grade bonds with extremely robust credit quality are of great importance to the institutional bond investors. Moreover, the institutional investors require relatively stable streams of cash flow in order to service their respective clients' returns to investment. Infrastructure bonds are seen to be one of the more stable sectors in the economy in this regard, mainly due to the fact that many of these projects tend to be state-led initiatives or concessions awarded to the private sector. To meet the stable cash flow requirement and the risk aversion of institutional investors, it is noted the optimal balance in risk-sharing arrangement between the public sector and the private sector is still evolving for the different types of infrastructure projects which have varying risk profiles.

Credit Risk Assessment Methodology for Evaluating Infrastructure Projects

Given the increasingly diverse needs of project sponsors and lenders in the infrastructure financing segment and the dynamic environment that these projects operate in, assessing the credit quality of such projects has become a more complicated and significant process. A concise methodological framework derived from methodologies used by Standard and Poor's and Ratings Agency Malaysia Berhad was presented to illustrate their analysts quantify and qualify the risks involved in project financing.

The analytical framework consists of 5 steps, namely; Project-level risks, Sovereign risk, Institutional risk, Force Majeure risk and Credit Enhancements. More detailed credit analysis is also applied to specific infrastructure projects such as Toll Roads and IPPs.

In addition to this, analysis of the financial covenants and credit enhancement mechanisms prevailing in the specific sectors shows distinct characteristics amongst the sectors. Despite the unique characteristics of each sector, there exist similar themes directed at ensuring that the debt servicing requirements are met and a systematic organization of funds for more stringent cash flow management, such as Waterfall cash flow structures and the use of designated accounts is in place.

Infrastructure Projects under the Ninth Malaysia Plan (9MP)

The Eighth Malaysia Plan (8MP) saw the expansion of the transportation, water supply and sewerage networks with total government expenditure for the 5-year period from 2001 to 2005 reaching RM38.7 billion on public utilities infrastructure alone. The Ninth Malaysia Plan (9MP) for the 2006-2010 period will continue to expand the development of infrastructure with concerted efforts to increase the efficiency of existing facilities and improve accessibility and linkages in rural areas.

Compared to the 8MP, there is a considerable increase in the 9MP in total spending on the Energy, Public Utilities and Housing segments, with a notable moderate increase in Education and Training spending too. Amongst these sectors, only the Transport, Education (having the largest scope of PFI activity) and Housing sectors possess the opportunities for Private Financing Initiatives (PFIs) as budgeted by the Government. This could mainly be due to the Government feeling the need of keeping these integral sectors under their control in the era of the requirement for the establishment of new infrastructure for the changing market environment; i.e. new infrastructure for 3G networks and infrastructure for alternative energy facilities.

Furthermore, given the significance of the proper setting up of this infrastructure in its initial stages of development, Development Finance Institutions are also expected to be involved in their growth. Notable large infrastructure projects planned for this period include the Inter-State Raw Water Transfer Project and projects pertaining to transportation service infrastructure in Penang.

Given the fiscal constraints faced the government and the large financing requirements to implement the 9MP, the government has promoted the concept of private financing initiatives (PFI) to assist in the implementation of these projects. There are various opportunities inherent in the use of PFI in the financing of these projects which include the increased use of Islamic Financing instruments which are seen to be well-suited for infrastructure financing.

Certain structures such as the "Istisna" are especially ideal for projects that have construction risk, which is one of the main characteristics of infrastructure financing. There is ample opportunity for project sponsors to tap into this market for funding especially from the pool of 'petro-dollars' coming from Arab nations.

Critical Success Factors in Malaysia's Infrastructure Financing Experience

Financing through the issuance of bonds is well suited for large scale, long term projects that have well-defined cash flow streams that can be utilized to service debt repayments. Bond financing is also used in instances where other forms of borrowing seem too risky for the lender to bear, for example, bank loans.

Another key factor underpinning the viability of long term bond financing is the nature and extent of government involvement in the project. If the project is in the form of a concession, the off-taker (usually the Government, government-linked company or privatized entity in which the government considers to be of strategic value) will be deemed to be of a credible stature, thereby further improving its status as a stable investment.

The presence of well-structured financing schemes with adequate and well-matched financial covenants will also increase the viability of debt financing. A stable and well-defined revenue stream will strengthen debt servicing ability and assure a high credit rating which is necessary given the risk adverse investment behavior prevalent in the Malaysian bond market. Most infrastructure projects (especially those implemented by the Government) are found to possess these favorable characteristics that enabled high bond ratings to be achieved, thereby contributing to the expansion of the domestic bond market for long term infrastructure project financing.

Recommendations for Participation in Financing of Infrastructure Projects

There is a need to focus on enhancing funding efficiency for infrastructure projects in Malaysia. One of these areas centers in on the construction risk for green field projects where there is an opportunity for a strong entity to provide a "construction performance guarantee" which covers the cost overrun, timeline delivery and performance specifications to enhance the project debt's ratings during the construction phase. This allows for the project bonds to be issued at higher ratings, thus lowering financing costs over the project life.

There are also not many ringgit bonds that have tenures exceeding 10-15 years, resulting in a maturity mismatch with respect to long gestation infrastructure projects which are often built for a useful life of 30 years and above. Thus, there is a need to address this shortfall through the introduction of instruments that can facilitate the matching of the funding tenures with the concession periods or useful life of the asset.

Given the pressure on projects to take on more debt in their financing structures to handle project financing requirements, it may also be feasible to consider setting up a Project Finance Equity Fund to lend equity support to project promoters. The viability of this fund rests on transparency and good corporate governance resulting in stronger returns to shareholders.

One possible solution to address the high risk aversion mind-set that is implicating the bond market is the setting up of a high yield bond fund which would focus on the A and BBB-rated bonds; managed by professionals who are well versed with the credit risks of companies. This outsourcing of funds from the Employees Provident Fund, Malaysia's largest bond investor as well as other institutional investors will help create a market for these purposes and deepen the bond market for sustainable development.

1. INTRODUCTION

1.1 Background

This report on Malaysia's infrastructure projects and the associated use of bonds for financing infrastructure development is the culmination of a 2-month study commissioned by Japan Bank for International Cooperation (JBIC).

The objectives of the study are:

- To provide a comprehensive review of infrastructure project financing in Malaysia covering the various types of infrastructure projects and the institutional framework, bond financing structure and mechanisms, role of intermediaries, stakeholders, major investors and market environment under which these projects were implemented.

- To identify infrastructure projects included in the 9th Malaysia Plan that could be financed under private financing initiatives (PFI).

- To suggest an evaluation framework and methodology for examining the feasibility of using bonds and other debt instruments to finance infrastructure projects, including the use of credit-enhancing mechanisms that enabled investors to participate actively in the bond market.

The research draws upon major infrastructure projects that have been implemented in Malaysia. Information gathered on the various infrastructure projects includes the major sponsors, stakeholders and investors, the enabling policy and regulatory framework and government support that facilitated infrastructure fund raising.

The study also examined successful cases and failures that encapsulate key lessons for infrastructure project financing and highlight the role and contribution of infrastructure financing to the development of the local bond market.

1.2 Methodology and Sources of Information

The study was based on information gathered from the following sources:

(1) Research materials, principally rating rationales and publications sourced from the country's two domestic rating agencies, Rating Agency Malaysia Berhad

(RAM) and Malaysia Rating Corporation Berhad (MARC). Project data were reconciled with the World Bank's Private Participation in Infrastructure (PPI) database for Malaysia.

(2) Conference, seminars and workshop papers on infrastructure development, financing and related topics.

(3) Interviews with selected rating analysts, sponsors, lead managers and a development finance institution.

(4) Official documents such as 5-year development plans particularly the Ninth (2006-2010) Malaysia Plan, privatization master plan and Industrial Master Plan (IMP) 2 (1996-2005) and 3 (2006-2020)

1.3 Organization of Report

The remaining sections of this report are organized as follows:

Section 2 provides an overview of infrastructure development in Malaysia and the issuance of bonds to finance infrastructure projects.

Section 3 details the changing role of the government in infrastructure development and provision of infrastructure services. In particular, the rationale and approach adopted by the government to harness private sector capabilities and resources to meet the growing societal demands for more comprehensive infrastructure and better quality services are discussed in relation to the country's the infrastructure development trends and requirements.

The commonly used financing methods for infrastructure projects, key financing characteristics and main players and intermediaries are discussed in Section 4.

Section 5 covers the legal and regulatory framework for raising capital to finance infrastructure projects is described in relation to the bond market's issuance and investment requirements.

The profile of investors in infrastructure bonds is examined in Section 6. In Section 7, a description of the credit risk assessment methodology adopted by credit rating agencies to rate these bonds is given. This is followed by a description of the major infrastructure projects identified for implementation during the 9th Malaysia Plan (2006-2010).

In the concluding section, suggestions on how JBIC could participate in the financing of infrastructure projects in Malaysia are provided.

2. OVERVIEW OF INFRASTRUCTURE DEVELOPMENT AND BOND ISSUANCE IN MALAYSIA

2.1 Infrastructure Development Trends

Both a cause and a consequence of sustained economic growth, Malaysia has achieved significant progress in developing its physical infrastructure to meet the growing demands arising from rapid industrialization, population growth, urbanization and an increasingly effluent society. The reach and quality of its physical infrastructure - in utilities (electricity, water and gas), transport, telecommunications and administrative facilities, now ranks among the upper quartile of middle-income economies.

The key factors contributing to the rapid development of the country's infrastructures and facilities include:

- Sustained economic growth: With annual GDP growth averaging 6.2% (CAGR) over the last 15 years (1990-2005), coupled with rapid urbanization and high population growth, the demand for basic infrastructure such as utilities (power, water and sewerage), transport, ports and telecommunications have grown at a faster pace (for example, electricity 9% CAGR, mobile phone subscribers 44%, water production 6.9%, over the same period).

- High public expenditure: There was continuing government emphasis on infrastructure development as evidenced by the high budgetary allocation and spending over the various 5-year development plans. The fiscal spending priorities on infrastructure are examined in Section 2.2.

- Fiscal constraints and early shift to privatization: In the early 1980s, unsustainable fiscal deficits coupled with the growing failures and inefficiencies of state-owned enterprises and government agencies involved in the provision of infrastructure services such as ports, electricity, telecommunications and highways, resulted in a change in policy stance that emphasized privatization and private sector-led growth. The implications of this policy shift on infrastructure development are assessed in Section 3.

- Strong domestic financing capabilities: In the first half of each of the decades in the 1970s, 1980s and 1990s, gross capital formation (or investment as it is more commonly known) generally exceeded savings as mirrored in the current account deficits. During the 1990-2005 period, the country's gross national savings averaged 34.5% of GDP while gross capital formation averaged 31.4%, giving rise to a positive savings-investment gap of 3.1% of GDP in current prices. The surplus domestic financing resources are particularly pronounced since the 1998 financial crisis where the excess savings averaged 12% of GDP or RM44.8 billion per annum during the 1998-2005 period. Besides surplus resources, the rapid development of the corporate bond market was another factor that facilitated the mobilization of long term savings for investment in long tenured, fixed coupon bonds through the pension funds, insurance and fund management industries.

- Active participation by government-linked companies and agencies: There was strong participation in Malaysia's privatization programmes by government-linked companies and agencies in various phases of privatization ranging from project identification, building and construction, operation and maintenance and investment as an equity or bondholder. The role of these GLCs in widening the scope of privatization and facilitating private sector financing through the issuance of long-term bonds is further explored in Section 3.2.

- National agenda to promote equity restructuring and Bumiputera participation in commerce and industry: Finally, related to the preceding point, the national political agenda to promote Bumiputera participation in commerce and industry via GLCs and Bumiputera-controlled companies was another key factor underpinning the strong infrastructure push.

2.2 Trends in Fiscal Spending on Infrastructure Development

The Malaysian government has placed strong emphasis on infrastructure development as evidenced by the large spending during each development plan period.

Rise in Infrastructure Spending by the Government

As shown in Table 1, total spending on infrastructure development, covering transport, communication, energy and water resources sectors over the twenty-year period from 1986-2005 amounted to RM98.8 billion. The amount spent on infrastructure rose sharply by 48% from RM11.2 billion in the 5th Malaysia Plan period (1986-1990) to RM16.6 billion in the 6th Malaysian Plan (1991-1995). The amount spent further jumped 59.1% to RM26.4 billion in the 7th Malaysia Plan period (1996-2000). In the 8th Malaysia Plan from 2001-2005, there was a further 68.8% rise to RM44.6 billion.

Table 1. Summary of Development Expenditure on Infrastructure

	5MP (1986-90)	6MP (1991-95)	7MP (1996-2000)	8MP (2001-05)	Total
Total infrastructure (RM billion)	11.2	16.6	26.4	44.6	98.8
% change over the last period		*48.2%*	*59.1%*	*68.8%*	
% of total	*11.3%*	*16.8%*	*26.7%*	*45.1%*	*100.0%*
Sub-sectors					
Transport	*60.9%*	*73.9%*	*78.8%*	*70.2%*	*72.1%*
Communication	*7.1%*	*0.4%*	*0.2%*	*1.3%*	*1.5%*
Energy	*8.2%*	*5.0%*	*9.6%*	*11.1%*	*9.4%*
Water resources	*23.8%*	*20.7%*	*11.4%*	*17.4%*	*17.1%*
Total	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***

Source: Compiled from various 5-year Malaysia Plans

High allocation for infrastructure development

A breakdown of the total federal government development expenditure is shown in Table 2. It is seen that the share of infrastructure in total spending remained about the same at 31.7 per cent in the 5MP and 30.3 per cent in the 6MP. It declined to 26.7 per cent in the 7MP (1996-2000) and the proportion remained approximately the same at 26.2% in the 8MP (2001-2005).

The lower proportion in government expenditure outlay for infrastructure during the 7MP and 8MP periods from 1996-2005 can be attributed to the significant rise in privatization of infrastructure projects as discussed in Section 2.3.

Relative to the size of the economy, Malaysia's public spending on infrastructure amounted to 2.0% of GDP over the 1986-2005 period. A sizeable increase is seen in the 2001-05 period where its share to GDP rose to 3.8% from 1.8% in the previous period. According to the World Bank, the average spending on infrastructure for developing countries is about 3.8% of GDP with some countries that have poorly developed infrastructure having to spend in excess of 5% of GDP.

The relatively low public spending on infrastructure development is due largely to the massive shift to the private sector as discussed in Section 2.3. Much of the success in the country's private financing of infrastructure projects is due to the ability of the project promoters and developers to raise funds in the debt capital market (see Section 2.4).

Table 2. Federal Government Development Expenditure on Infrastructure as a Percentage of Total Expenditure and GDP

Sector	5MP (1986-90)		6MP (1991-95)		7MP (1996-2000)		8MP (2001-05)	
	RM mn	%	RM mn	%	RM mn	%	RM mn	%
Economic	22,886	*64.8*	27,712	*50.7*	47,172	*47.6*	65,446	*38.5*
a. Agriculture	7,325	*20.8*	6,344	*11.6*	8,139	*8.2*	7,749	*4.6*
b. Mineral resources development	43	*0.1*	50	*0.1*	41	*0.0*	49	*0.0*
c. Commerce and industry	3,981	*11.3*	4,047	*7.4*	11,258	*11.4*	10,174	*6.0*
d. Transport	**6,823**	***19.3***	**12,270**	***22.4***	**20,826**	***21.0***	**31,318**	***18.4***
e. Communication	**792**	***2.2***	**70**	***0.1***	**47**	***0.0***	**560**	***0.3***
f. Energy	**918**	***2.6***	**829**	***1.5***	**2,544**	***2.6***	**4,969**	***2.9***
g. Water resources	**2,667**	***7.6***	**3,433**	***6.3***	**3,000**	***3.0***	**7,753**	***4.6***
h. Feasibility studies	52	*0.1*	99	*0.2*	265	*0.3*	421	*0.2*
i. R&D	285	*0.8*	570	*1.0*	1,053	*1.1*	1,960	*1.2*
Social	8,764	*24.8*	13,555	*24.8*	31,248	*31.6*	69,377	*40.8*
a. Education and training	5,700	*16.1*	7,315	*13.4*	19,724	*19.9*	43,729	*25.7*
b. Health	931	*2.6*	2,387	*4.4*	3,726	*3.8*	9,506	*5.6*
c. Information and broadcasting	20	*0.1*	108	*0.2*	192	*0.2*	450	*0.3*
d. Housing	1,452	*4.1*	1,825	*3.3*	3,331	*3.4*	6,972	*4.1*
e. Culture, youth and sport	131	*0.4*	451	*0.8*	1,365	*1.4*	1,113	*0.7*
f. Local authorities and welfare	291	*0.8*	701	*1.3*	1,565	*1.6*	5,942	*3.5*
g. Village and communication development	237	*0.7*	543	*1.0*	1,319	*1.3*	1,665	*1.0*
h. Purchase of land	2	*0.0*	225	*0.4*	62	*0.1*	-	*0.0*
Security	2,527	*7.2*	10,987	*20.1*	11,644	*11.8*	22,042	*13.0*
a. Defence	1,497	*4.2*	9,258	*16.9*	9,539	*9.6*	17,298	*10.2*
b. Internal security	1,030	*2.9*	1,729	*3.2*	2,105	*2.1*	4,744	*2.8*
General Administration	1,122	*3.2*	2,451	*4.5*	8,937	*9.0*	13,135	*7.7*
a. General services	944	*2.7*	2,352	*4.3*	8,746	*8.8*	12,839	*7.6*
b. Upgrading and renovation	179	*0.5*	99	*0.2*	191	*0.2*	296	*0.2*
TOTAL	**35,300**	***100.0***	**54,705**	***100.0***	**99,037**	***100.0***	**170,000**	***100.0***
Memo:								
Infrastructure spending (Economic: d - g)	11,200	*31.7*	16,602	*30.3*	26,416	*26.7*	44,600	*26.2*
% GDP	*2.4%*		*1.9%*		*1.8%*		*3.8%*	

Source: Compiled from various 5-year Malaysia Plans

Government Spending by Infrastructure Sub-sector

A large part of the public spending on infrastructure is centered on transport. It amounted to RM71.2 billion or 72.1% of the total spending on infrastructure over the 1986-2005 period (Table 3 and Figure 1). Water resources sector is the second large recipient of government funding, amounting RM16.9 billion or 17.1% of the total. Expenditure on communications and energy on the other hand was relatively small. The relative small amount spent on communications is largely due to the privatization of the national telecommunications company (Syarikat Telekom Malaysia) and the opening of the mobile telephone industry to private players. Likewise, government spending on energy was relatively small, at RM9.3 billion, attributed largely to the privatization of the national electricity company (Tenaga Nasional Berhad) and the opening of the electricity generation industry to independent power producers (IPPs) in 1994.

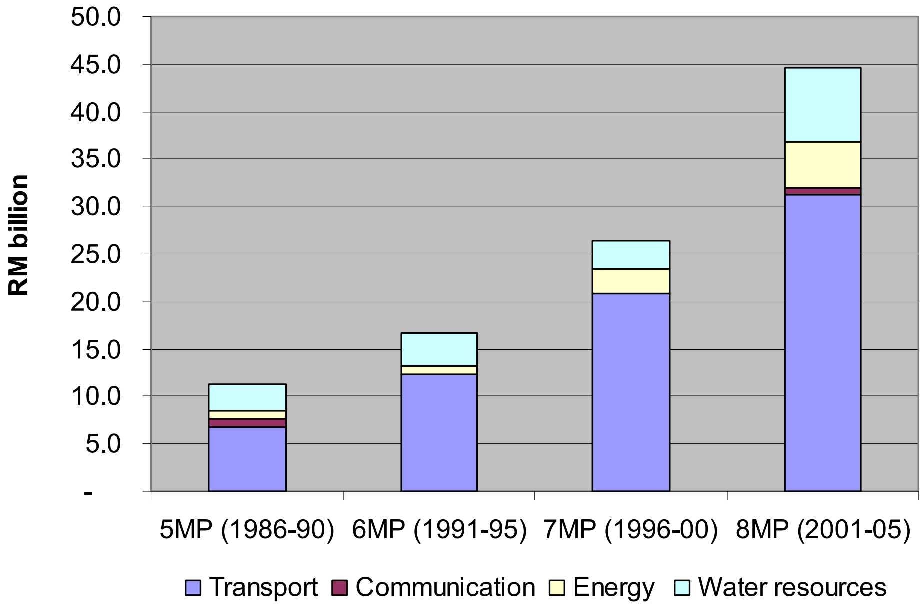
Table 3. Government Spending by Infrastructure by Sub-sector

(RM billion)

Infrastructure Sector	5MP (1986-90)	6MP (1991-95)	7MP (1996-2000)	8MP (2001-05)	Total	% of total
Transport	6.8	12.3	20.8	31.3	71.2	72.1%
Communication	0.8	0.1	0.0	0.6	1.5	1.5%
Energy	0.9	0.8	2.5	5.0	9.3	9.4%
Water resources	2.7	3.4	3.0	7.8	16.9	17.1%
Total	**11.2**	**16.6**	**26.4**	**44.6**	**98.8**	**100.0%**

Source: Compiled from various 5-year Malaysia Plans

Figure 1. Breakdown of Infrastructure Spending by Sub-Sectors



2.3 Private Participation in Infrastructure Projects

In the World Bank's Private Participation in Infrastructure (PPI) database, a total of 87 projects in Malaysia were listed between 1990 and 2005. A breakdown of the projects by primary sector and by year is shown in Table 4. Altogether there were 24 projects in energy, 7 in telecommunications, 43 in transport and 13 in water and sewerage.

Table 4. Number of Projects with Private Sector Participation

Financial Closure Year	Energy	Telecom	Transport	Water and sewage	Total
1990	0	1	0	0	**1**
1991	0	0	1	0	**1**
1992	2	0	1	1	**4**
1993	3	0	4	3	**10**
1994	5	4	5	1	**15**
1995	1	2	6	1	**10**
1996	0	0	5	1	**6**
1997	2	0	5	0	**7**
1998	0	0	2	0	**2**
1999	1	0	2	0	**3**
2000	0	0	3	2	**5**
2001	6	0	2	1	**9**
2002	1	0	0	1	**2**
2003	1	0	4	1	**6**
2004	1	0	1	1	**3**
2005	1	0	2	0	**3**
Total	24	7	43	13	**87**
% of total	28%	8%	49%	15%	**100%**

Source: World Bank PPI Database

The value of private investment in these projects for the period from 1990 to 2005 is tabulated annually in Table 5. Between 1990 and 2005, a total of RM150.3 billion were invested in infrastructure projects. Of this total, RM44.8 billion or 29.8% was spent on the energy sector, RM25.6 billion or 17.0% on telecommunications, RM45.8 billion or 30.5% on transport and RM34.1 billion or 22.7% on water and sewerage projects.

Table 5. Private Investments in Infrastructure Projects

(RM million, current prices)

Year of Investment	Energy	Telecom	Transport	Water and sewage	Total	% of nominal GDP
1990	0	2,353	0	0	2,353	2.0
1991	0	0	0	0	0	0.0
1992	3,439	0	408	723	4,570	3.0
1993	3,424	0	1,539	6,585	11,547	6.7
1994	8,347	1,962	5,275	2,072	17,656	9.0
1995	3,010	2,538	4,738	25	10,311	4.6
1996	0	2,599	7,945	0	10,544	4.2
1997	605	1,893	6,138	0	8,637	3.1
1998	0	687	2,322	0	3,009	1.1
1999	741	1,125	1,193	0	3,059	1.0
2000	0	1,049	4,153	15,067	20,269	5.9
2001	6,707	1,592	2,599	0	10,898	3.3
2002	46	1,813	0	61	1,919	0.5
2003	7,790	1,657	5,966	0	15,413	3.9
2004	4,598	4,514	1,300	9,580	19,992	4.4
2005	6,059	1,814	2,223	0	10,096	2.0
Total	**44,764**	**25,595**	**45,800**	**34,113**	**150,273**	**3.4**
% of total	29.8%	17.0%	30.5%	22.7%	100.0%	

Source: World Bank PPI Database

An estimate of the total combined public and private investment in infrastructure based on the public expenditure and the above private investment is shown in Table 6. There could be double-counting in the pooling of the public spending and private investments. Nonetheless, the total amount provides an indication of the likely magnitude of total infrastructure spending in the country. It is seen that the total infrastructure spending averaged 5.4% of GDP which is close to the average observed for developing countries.

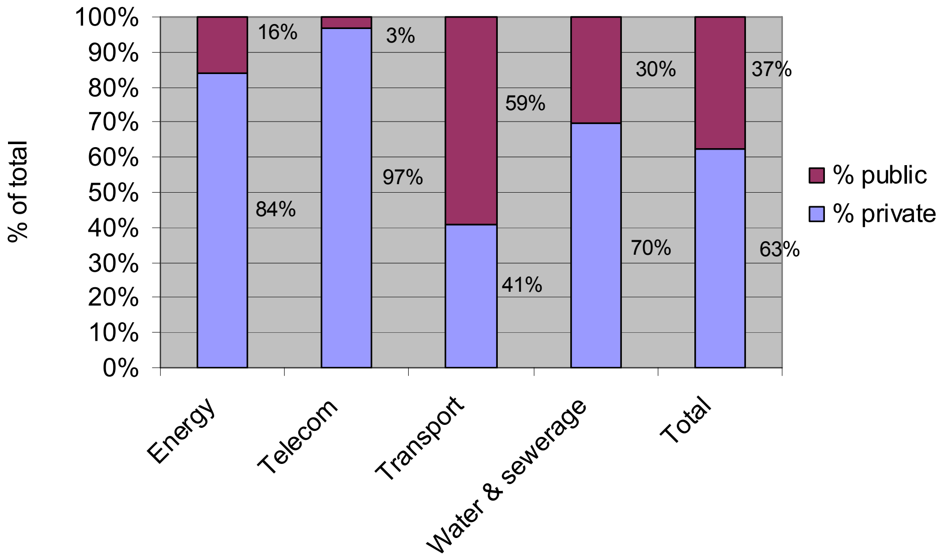
Table 6. Total Public and Private Investment in Infrastructure

(RM million)

Year	Energy	Telecom	Transport	Water & sewerage	Total	% of GDP
1990	184	2,511	1,365	533	4,593	3.9
1991	166	14	2,454	687	3,320	2.5
1992	3,605	14	2,862	1,410	7,890	5.2
1993	3,589	14	3,993	7,271	14,868	8.6
1994	8,513	1,976	7,729	2,759	20,976	10.7
1995	3,176	2,552	7,192	712	13,631	6.1
1996	509	2,608	12,110	600	15,827	6.2
1997	1,114	1,903	10,304	600	13,920	4.9
1998	509	696	6,488	600	8,292	2.9
1999	1,250	1,134	5,358	600	8,342	2.8
2000	509	1,058	8,319	15,667	25,552	7.4
2001	7,701	1,704	8,863	1,551	19,818	5.9
2002	1,039	1,925	6,264	1,611	10,839	3.0
2003	8,784	1,769	12,230	1,551	24,333	6.2
2004	5,592	4,626	7,563	11,130	28,912	6.4
2005	7,053	1,926	8,487	1,551	19,016	3.8
Total	53,290	26,431	111,579	48,831	240,131	5.4
% private	84%	97%	41%	70%	63%	63%
% public	16%	3%	59%	30%	37%	37%

Source: World Bank PPI Database

Figure 2. Relative Share of Public-Private Sector in Infrastructure Spending



As shown in Figure 2, there is extensive involvement of the private sector in financing investment across all the infrastructure sub-sectors, the highest being in telecommunications with 97% share followed by energy with 84% share.

2.4 Financing of Infrastructure Companies and Projects through Bond Issuance

Overview of the Ringgit Bond Market

Although the beginning of the Malaysian corporate bond market, or the private debt securities (PDS) market as it is more popularly called locally, can be traced to the establishment of the National Mortgage Corporation (or Cagamas Berhad) in 1986, it was not until the promulgation of the Guidelines on the Issuance of Private Debt Securities by the Central Bank of Malaysia in 1988 that Malaysian companies could issue bonds to raise funds from the public. In 1990, the first domestic rating agency was incorporated and it rated the first two corporate issues in 1991.

Among the early development initiatives mounted by the government to accelerate market acceptance and widen the use of credit ratings was to make credit rating of corporate bonds mandatory in 1992. This was followed by the establishment of the second rating agency in 1995 to provide issuers with an alternative source, besides promoting competition in the domestic rating industry.

These developments together continuing fine-tuning of the legal and regulatory framework, widening of the pool of market intermediaries such as lead managers and trustees and the streamlining of market trading and information infrastructures enabled the largely over-the-counter bond market to expand rapidly in tandem with the growing demand of fixed income investors such as pension funds, insurance companies and fund management companies.

Issuance of bonds to finance infrastructure projects and fund infrastructure companies

Despite the young age, the necessary legal, regulatory and market infrastructures were sufficient to generate investors' appetite for large scale, long term bonds during the formative years of the bond market. As shown in Table 7, infrastructure bonds accounted for a large volume of the issuance (in value terms) during the early years of the bond market.

On average infrastructure bonds accounted for 36% of the total bond issuance between 1993 and 2006. The sharp decline in issuance in 1998 and 1999 was caused by the Asian financial crisis. The subsequent sharp rise from 2000 onwards was the partly the result of corporate debt restructuring that saw the substitution of short term bank borrowings and bond facilities with long tenured bonds to address the funding and maturity mismatches that contributed to the financial distress of infrastructure companies.

Table 7. Issuance of Bonds by Infrastructure Companies and Special Purpose Vehicles (SPV)

(RM million)

	Infrastructure sector					All issues in the bond market	% infrastructure bonds
	Power	**Transport**	**Water**	**Telco**	**Total**		
1993	1,650	0	0	0	1,650	3,364	49%
1994	2,261	0	0	0	2,261	5,506	41%
1995	0	3,065	0	0	3,065	9,201	33%
1996	250	2,200	0	0	2,450	12,384	20%
1997	2,230	0	0	0	2,230	14,623	15%
1998	529	0	0	0	529	10,832	5%
1999	0	0	0	0	0	23,350	0%
2000	1,619	1,505	3,542	0	6,666	21,992	30%
2001	9,420	3,495	547	700	14,162	31,502	45%
2002	945	8,913	300	1,100	11,258	26,660	42%
2003	10,995	5,950	350	8,029	25,324	42,790	59%
2004	4,427	1,170	3,943	100	9,640	28,050	34%
2005	8,289	7,253	3,195	460	19,197	35,656	54%
2006	2,401	5,435	1,808	292	9,936	31,737	31%
Total	**45,016**	**38,986**	**13,685**	**10,681**	**108,368**	**297,648**	**36%**
% of total	*41.5%*	*36.0%*	*12.6%*	*9.9%*	*100.0%*		

Source: Compiled from Bondweb Malaysia and RAM Bond Market databases

The power sector is the largest issuer with total value issued amounting to RM45.0 billion or 41.5% of the total of RM108.4 billion issued between 1993 and 2005. Transport is the second largest with RM39.0 billion or 36.0% of the total issue value. The other two sectors, water and telecommunications, account for the remaining amount of RM13.7 billion (12.6%) and RM10.7 billion (9.9%) respectively.

It is evident that the bond market is the major provider of funds for infrastructure financing in the private sector. The total value of bonds issued by the infrastructure sector amounting to RM108.4 billion represents a sizeable 72% of the RM150.3 billion invested in infrastructure by the private sector as presented in Table 5.

The bond issues include refinancing of existing borrowings, funds raised for working capital purposes and acquisitions of companies. Assuming that the bonds raised for such purposes amounted to 30% of the total funds, the financing amount via bond issues still account for a sizeable 50% of the total private investment in infrastructure projects.

2.5 Current Infrastructure Development Status

Malaysia's current infrastructure quality and access is comparable to those in the upper middle income countries as shown in Table 8.

Table 8. Comparison of Malaysia's Infrastructure Indicators with World Average and Lower Middle and Upper Middle Income Countries

Infrastructure Performance Measure		Malaysia					World Average	Lower middle income	Upper middle income
		2000	2001	2002	2003	2004			
TRANSPORT: ROADS & RAILWAYS									
Road density in terms of population	road-km / 1000 people	2.8	3.0	2.9	3.1	3.0	**6.7**	**4.9**	**9.2**
Road density in terms of land	road-km / 1000 sq km	202.3	218.7	219.8	235.1	236.6	**840.6**	**327.7**	**1,076.4**
Rail lines density in terms of population	rail-km / 1000 people			0.07			**0.33**	**0.30**	**0.51**
Rail lines density in terms of land	rail-km / 1000 sq km			4.98			**23.12**	**15.20**	**31.3**
Paved roads	% of total roads		78				**50**	**47**	**57**
ELECTRICITY									
Access to electricity network	% population	95					**60**	**82**	**87**
Electricity reform indications									
a. Regulation: Existence of independent regulatory agency						YES			
b. Ownership: Existence of private participation in generation						YES			
c. Ownership: Existence of private participation in distribution						NO			
d. Market structure: Vertical integration						NO			
WATER AND SEWAGE									
Access to improved water sources	% population			95			**91**	**94**	**96**
Access to improved sanitation	% population (rural)			98			**78**	**85**	**91**
Water reform indicators									
a. Regulation: Existence of independent regulatory agency						NO			
b. Ownership: Existence of private capital						YES			
TELECOMMUNICATIONS									
Total telephone subscribers	per 1000 people				624		**501**	**301**	**635**
Mainlines teledensity	per 1000 people				182		**213**	**126**	**261**
Cellular subscribers	per 1000 people				442		**296**	**179**	**381**
Cost of local phone call	US cents / 3 min				2		**9**	**6**	**9**
Cost of phone call to US	US cents / 3 min		237				**335**	**314**	**305**
Cost of cellular local call	US cents / 3 min off peak			31			**49**	**44**	**54**
ICT Reform indicators									
a. Regulation: Existence of independent regulatory agency						YES			
b. Ownership: Existence of private capital						YES			
c. Market structure									
- Local phone monopoly						NO			
- Digital mobile monopoly						NO			
- Long distance monopoly						NO			
- Leased lines monopoly						NO			
- Internet service provider monopoly						NO			

Source: Estache, A. and AnaGoicoechea, 2005. A "Research" Database on Infrastructure Economic Performance," World Bank Policy Research Working Paper 3643, June 2005.

Our assessment for each sub sector is summarized in the following sections:

Roads and Rail: Although the proportion of paved roads far exceeds world average and those for lower middle and upper middle income countries, it is seen that road and rail densities in terms of population and in terms of land are significantly lower, suggesting further scope for expanding the road and rail network. The road and rail projects being planned under the 9th Malaysia Plan (2006-2010) are discussed in Section 8 of this report. There is widespread participation by the private sector as toll road concessionaires under the 'Build-Operate-Transfer' mode of privatization.

Electricity: It is noted that more than 95% of the population in the country has access to electricity compared to the world average of 60% and 82% for lower middle income and 87% for upper middle income countries. Following the 'brown-outs' in the early 1990s, the 'First Generation" independent power producers (IPPs) followed by the "Second" and "Third" Generation IPPs have added a total of 6,850 MV of new generation capacity in addition to the 7,022 MW planted up by the national electricity company (Tenaga Nasional Berhad) since 1990. The participation by these IPPs is described in greater detail in Section 4.3.1.

Presently, the country's electricity reserve margin is reported to be around 40%. The next IPP is scheduled to come on-stream in 2008. In terms of regulation, there exists an independent regulatory agency (Energy Commission). Private participation and competition are currently confined to the generation market. The distribution market remains a monopoly under the incumbent national electricity company. Interestingly, the company has divested one of its coal-powered generation plants to the private sector.

With the enactment of the 5th Fuel Policy in 2001 to optimize fuel diversification mix and reduce over-dependence on a single fuel (crude oil), there exists a vast scope to promote renewable energy as the fifth fuel, particularly biomass, biogas, municipal waste, solar and mini hydro. Other sources currently receiving much attention in the private sector is the production of palm oil diesel and hydrogen fuel.

Water and Sewerage: Although the population has high access to improved water sources and improved sanitation, the sector is confronted with multiple challenges of meeting the rising demand for potable water and sustainable management of water resources. Under the 8th Malaysia Plan, there were 129 water supply projects identified for implementation with a total allocation of RM4 billion. For the 2000-2050 period, a total of 62 major water supply projects have been identified with total expenditure estimated at RM52 billion. Three water crises have added greater urgency to the need to enhance water management and waste disposal in the country. They are the 1990 water crisis in the state of Melaka in which the Tunggal Dam dried up, the Selangor water crisis of 1998 where about 1.8 million people were affected by water supply disruptions and the 2005 crisis in Negeri Sembilan (Seremban area) and Johor (Kluang areas) which experienced water shortage and rationing.

Besides high physical loss, with non-revenue water ranging from 20% to 60% in some Malaysian states and the unequal distribution of water resources between water rich states (Pahang, Terengganu, Kelantan, Perak and Sarawak) and water thirsty states (Penang, Melaka, Selangor and Negeri Sembilan), there is a need to promote better water resource development and management and inter-state transfer.

Some states such as Penang and Selangor have proceeded with the privatization of the water utilities. Except for Penang, the water utility company has to face the challenge of high capital funding requirements and low tariffs that result in commercial losses and unsustainable return on investment.

Given that control over the management of water resources was vested in the individual states, amendments to the Constitution were made in January 2005 to move the water supply services from the State List to the Concurrent List. The proposed Water Services Industry Bill and National Water Services Commission Bill are in the process of being enacted in the Parliament to streamline the legislative and regulatory framework for the management of the country's water resources.

Telecommunications: Although mainlines teledensity is below world average and that of the upper middle income countries, cellular subscribers at 442 per 1000 people far exceeds the world average of 296 as well as the average of 381 for upper middle income countries. However, not shown in the table, is country's low broadband penetration rate where the 'last mile' connection to homes is around 1%. Fortunately, the strong growth and rapid penetration of mobile telephony has placed the 3 dominant telecommunications companies in a strong financial position to introduce new technologies for increasing broadband penetration such as wireless (WIFI), Wireless Microwave Access (WIMAX) and 3G.

3. PUBLIC SECTOR ROLE IN INFRASTRUCTURE PROJECT DEVELOPMENT

3.1 Main Policy Initiatives, Regulations and Legislations for Infrastructure Development

Privatisation as a National Policy

The Government first announced privatization as a national policy in 1983. Representing a new approach in the national development policy, it complemented other national policies such as the Malaysia Incorporated policy that were aimed at achieving the following objectives:

- facilitate private sector-led growth of the economy
- relieve Government's financial and administration burden
- reduce Government's presence in the economy
- trim both the level and scope of public spending and to allow market forces to govern economic activities and improve efficiency and productivity in line with the National Development Policy.
- promote active participation by Bumiputeras in corporate sector to correct imbalances in wealth distribution and corporate sector participation.

The privatization policy was incorporated into the framework for national development (ie. 5th Malaysia Plan, 1986-1990). In 1985 the Guidelines on Privatisation was published that spelt out the objectives, methods and implementation machinery. In 1987, work begun on the Privatisation Masterplan. The Master Plan explained the implementation of the policy as well as the progress achieved and addressed the future direction of the programme. Completed in 1991, the plan identified 176 state-owned enterprises valued at RM13.1 billion and involving 155,000 employees to be privatized over the next 5 years and another 70 SOEs valued at RM3.2 billion and involving 42,000 employees in the longer term. By end 2003, there were 474 privatized projects.

Listed in Table 9 are the projects and entities that were privatized in the early years.

Table 9. Privatised Infrastructure Projects and Entities

Sector	Infrastructure-related Government Entity and Projects Privatized	Method	Year
Transport	(1) North Klang Straits Bypass (2) Jalan Kuching/Kepong Interchange (3) Kuala Lumpur Interchanges (4) North-South Highway (5) Labuan-Beaufort Interconnection	BOT BOT BOT BOT BOT	1983 1985 1987 1988 1988
Port	(1) Klang Container Terminal (2) Lumut Dockyard (3) Sabah Shipyard	Lease + Sale of Asset Corporatisation Sale of equity	1986 1991 1991
Water Supply	(1) Semenyih Dam (2) Maintenance of Tube Wells (3) Larut Matang Water Supply (4) Ipoh Water Supply	Management contract Management contract BOT BOT	1987 1988 1989 1989
Telecommunications	(1) Syarikat Telekom Malaysia Berhad (2) Postal Services Department	Sale of equity Corporatisation Sale of equity	1990 1992 1995
Power	(1) Tenaga Malaysia Berhad (TNB)	Sale of equity	1992

Source: Yeah (1993)

Privatization can be implemented by several methods as follows:

- Sale
- Lease
- Management Contract
- Build
- Build-Operate-Transfer (BOT)
- Build-Operate-Own
- Build-Operate
- Build-Lease-Transfer
- Land Development/Land Swap
- Management Buy Out

Either a single method or a combination of methods may be chosen depending on the merits of each case. The choice of methods will be considered case by case. As a general rule, however, the method which results in the maximum practicable degree of private sector involvement will be aimed for. Comparatively, the sale method is expected to satisfy this criterion. In addition, the methods used reflect the requirements of national objectives and the constraints in each case.

The privatization strategies that were pursued include:

- Emphasizing projects which have high multiplier effects and which stimulate economic growth;
- Strengthening and streamlining the implementation process to ensure the effectiveness of the privatization programme;
- Ensuring that privatized projects are commercially viable and contribute to social well-being;
- Strengthening the regulatory authorities to protect consumer interests and foster the healthy development of privatized sectors;
- Enhancing Bumiputera participation through vendor schemes and provision of better access to capital; and
- Promoting wider public participation in privatized entities through public listing which concurrently enables infrastructure project companies to raise tap the equity market for capital funds.

In order to facilitate the implementation of privatization programme, the Government has amended a number of laws such as Pension Act 1980, Telecommunication Act 1950, Port Act 1963, and Electricity Act 1949. The sector regulations that were introduced to facilitate privatization and deregulation are summarized in Table 10.

Table 10. Changes in the Regulatory Framework to Promote Private Participation in Infrastructure Development by Sector

Sector	Regulatory Agency	Legislation	Type of Regulation
Road	Public roads are regulated by the Road Transport Department (Ministry of Transport) Privatized roads are regulated by the Malaysian Highway Authority under the Ministry of Works.	Road Transport Act, 1987	Price regulation (toll rates) by Ministry of Works. Commercial vehicle licensing (entry) by Commercial Vehicle Licensing Board, Ministry of Entrepreneurial Development
Railways	Railways Department (Ministry of Transport)	Railways Act 1991 and Railways (Successor Company) Act 1991	Price regulation (fare rates) by Ministry of Transport
Ports	Corporatized ports are regulated by the respective Ports Commission (e.g. Johor Port Authority, Bintulu Port Authority, Klang Port Authority etc.) Federal ports are regulated by the Ministry of Transport.	Ports Authorities Act 1963, Ports Act (Privatization), 1990, and the various port commission acts for each port	Price regulation by port commission
Airports	Civil Aviation Department, Ministry of Transport	Civil Aviation Act, 1969; Landing, Parking and Housing, Passenger Services and Air Navigation Facility Charges (and) Regulations 1992.	Price regulation by Ministry of Transport
Communications and Multimedia	Communications and Multimedia Commission	Communications and Multimedia Act 1998	Price regulation and Competition regulation – CMC advises the Ministry of Energy, Communications and Multimedia. Entry is regulated via licensing.
Electricity Supply	Energy Commission	Energy Commission Act 2001, Electricity Supply Act 1990, Electricity Supply (Successor Company) Act 1990	Regulation of wholesale prices via agreements between IPPs and Tenaga Nasional Berhad (incumbent distributing company). Retail tariffs regulated by Ministry of Energy, Communications and Multimedia.
Water Supply	Water Supply Department, Water Board, PWD	Water Supply Act, and state legislations. Water Services Industry Bill (drafting stage) Water Services Commission Bill (drafting stage)	For privatized supplier prices are regulated by concession agreements.

Source: Adapted from Cassey Lee (2004)

3.2 Involvement of Government-linked Companies and their Objectives

There are 40 Government-Linked Corporations (GLCs) listed on the Stock Exchange in Malaysia which account for around 30% of market capitalisation and under 10% of country's GDP. The largest GLCs operate in the infrastructure segments such as Telekom Malaysia (Telco) and Tenaga Nasional (Electricity). The government either directly or indirectly influences policy and major decisions in these GLCs through federal agencies such as Employee's Provident Fund (EPF).

Since 2004, the GLCs have undergone a re-vamp and one of the main developments from this plan of action was the placement of 30 GLCs under the management of Khazanah Nasional Bhd which is the official investment body of the Government. The most influential and active GLCs are under this Khazanah umbrella of which the organizational structure (and corresponding interest holdings of each) pertaining to infrastructure and utilities are presented in Table 11.

Table 11. Investment Holdings of GLCs under Khazanah Nasional Berhad

Sector	Company (% shareholding)
Transportation	Penerbangan Malaysia *(100%)*, MAS *(69.34%)*, Malaysia Airport *(72.74%)*, PLUS Expressways *(26.34%)*, Westport *(8.55%)*, ParkMay *(24.85%)*
Property/Construction	STLR *(100%)*, UDA Holdings *(50.01%)*, Tradewinds Hotels & Resorts *(25.67%)*, Putrajaya Holdings *(15.59%)*, Ho Hup *(17.2%)*, Opus International *(62.37%)*, UEM Builders *(51.7%)*
Communications	Telekom Malaysia *(40.1%)*, Sunshare Investments *(20%)*, Mobile One Ltd *(29.85%)*, PT Excel comindo *(16.81%)*, Pos Malaysia *(30.27%)*, Time DotCom *(30.04%)*, Time Engineering *(45.03%)*
Power	Tenaga Nasional *(36.96%)*, Northern Utility *(20%)*, SWEC *(12%)*
Conglomerate	DRB-Hicom *(10.38%)*, UEM *(100%)*, UEM World *(50.81%)*

Source: Khazanah Nasional Bhd

GLCs play an integral role in infrastructure development in the country as the main sponsor or off-taker for these projects. They are responsible for a substantial share of activity in the key industries of the Malaysian economy. In the power segment, Tenaga Nasional Berhad (TNB) as the national electricity company has entered into Purchasing Power Agreements (PPAs) with the Independent Power Producers (IPPs). The PPA specifies the terms of amount of supply and the rate at which the electricity generated by these IPPs are taken up by TNB as its distributor. Thus, by having these GLCs as the off-takers for the majority of projects, there is an added security feature embedded into the project structure.

Another interesting point to mention is that many of the infrastructure projects in the past have been awarded to GLC construction companies. Thus, this method of nomination for infrastructure projects without a competitive or open tender process has come under much scrutiny. Nowadays, the process of tendering for infrastructure projects has been more regulated and more open to the participation of private entities. However, there are still some uncertainties surrounding the tender process with respect to the prices to which the tender is awarded. There is sentiment in the market that prices tend to be inflated which would have efficiency implications on the economy.

Conversely, projects carried out by GLCs could also be seen as a sign of stability and security for investors as these companies have the institutional backing of the Government and companies have a long, credible track record for completing these projects up to standard.

The Government policy has been very supportive of the incumbents in the utilities sector that were once Government-run entities and this trend has prevailed in most industries like Telecommunications and Energy. There is continuity and stability in these industries which form the backbone of the economy. However, another motivation behind many projects especially in the case of privatization activities in the past stem from a profit motive standpoint. There is substantial GLC activity in infrastructure due to the financial benefits that can be reaped from carrying out these projects.

There has been some re-structuring of GLCs in recent years (as mentioned above) in order to create a more arms-length relationship structure between the Federal Government and GLCs. Some of these measures are listed below:-

- Newly appointed management tapped from the private sector
- Introduction of market-based KPIs to ensure efficiency in operation
- Introduction of performance-linked management contracts
- Stronger emphasis on Corporate Governance and the subsequent removal of GLC regulators from the Board of Directors of the GLCs.

Public entities are expected to remain important players in the financing, development and delivery of infrastructure projects and with the on-going reforms and higher emphasis on efficiency in these organizations, the stability of these entities may prove a way in which Malaysia will be able to access a higher proportion of external financing in these infrastructure projects.

3.3 Assessment of Public Sector Participation and Government Policy Stance towards Infrastructure Projects

As evidenced by the aggressive process of privatization to accelerate the development of new infrastructure and high budgetary allocation for infrastructure development, it is clear that policy makers view infrastructure projects as a key development tool from an economic, social and political perspective as elaborated below.

Economic and fiscal dimensions: Although several privatized projects and entities, notably the Kuala Lumpur Light Rail Transit, national sewerage company (Indah Water Konsortium), had to be rescued following the Asian financial crisis, the government's strong emphasis on private sector participation in infrastructure development is unlikely to diminish due to:

- consistency with national development policy thrust on private sector-led growth.
- stronger and more efficient implementation capacity of the private sector compared to the public sector.
- government funding constraints due to the need to reduce the fiscal deficit that is now entering the 10th year in 2007 since the sharp rise in public spending to counter the 1998 recession following the outbreak of the Asian financial crisis.
- surplus financial position of NFPEs and government-linked companies that places them in a strong position to undertake infrastructure projects identified by themselves or by the government.

Socio-political dimension: Due to the high value and capital-intensive nature of infrastructure projects, they have become a useful means to help fulfill the government's social and political agenda of raising Bumiputera equity ownership and fostering an industrial and commercial community amongst them.

Following two decades of privatization experience, the earlier aggressive policy stance is now moderated by emerging concerns over the costs of privatization and public objections over the manner in which the projects and concessions had been awarded previously. These concerns and the manner they are being addressed are discussed below.

- Competitive bidding: An attempt is being made by the new administration under the present Prime Minister to institute competitive bidding or open tender for government projects and contracts.

- Tariff setting: This remains a contentious and politicized issue due to commitments written into the concession agreements that allow for scheduled increases in tariffs; otherwise the government has to pay compensation to the operator or concessionaire. Attempts are now being made by the government to re-negotiate these terms particularly for toll road concessions and the power purchase agreements of the IPPs. It is seen that in some concessions especially for toll roads and electricity generation there is unequal sharing of demand risk and a more equitable way of sharing this risk needs to be designed.
- Negotiation skills: In the early years of the privatization push, the government provided generous direct and indirect support to ensure the commercial success of the privatized projects. Moving up the learning curve, the government has become more skillful in negotiating more favorable contracts that shift more risks to the private developers. There are however some remaining concerns over the lack of capacity and the absence of a systematic framework or method to quantify the financial obligations arising from the risks borne by the government.
- Risk management: The extent of government's exposure to the completed, new and planned privatization projects needs to be assessed and an appropriate risk management system established to manage the contingent liabilities and optimize the allocation of resources. A ballooning of contingent liabilities will result in market uncertainty over the fiscal health of the government. A difficult-to-assess area is the cost of implicit guarantees for large infrastructure projects. These include lobbying for the participation of private institutions in projects considered to be strategic to the government. Such signal of strong implicit commitment has helped to facilitate financing by private and government-linked institutions. The optimal balance in risk sharing between the private and public sectors is still evolving and it is imperative that the right balance is established for infrastructure development to be expanded with the continuing participation of the private sector.

4. FINANCING METHODS FOR INFRASTRUCTURE PROJECTS

4.1 Overview of Financing Methods Available for Infrastructure Projects

The Generic Case

Project Financing refers to the financing of long-term infrastructure projects usually in the realm of public utilities. Funding is based on a financial composition that involves both equity and debt, structured in a way in which potential cash flow from the project will be used to repay the commitments to the external sources of financing. Special Purpose Vehicles (SPVs) are created for the purpose of the project where assets, along with the revenue generating source are used to secure the project's viability.

Financial institutions such as investment banks, trustees and rating agencies form part of the intermediaries network that enables this relatively complex financing initiative to come together cohesively.

Such is the nature of project financing and the inherent risks involved in this financing segment, that ways to diversify risks amongst various parties is necessary in the structure. Moreover, with the sharing out of risk, the corresponding share of profit must also be factored in.

A generic project financing scheme consists of equity investors known as sponsors and a syndicate of banks that provide loans to the project. The most common type of bank loan used in this situation is a non-recourse loan which is secured by the project and paid from the project's cash flow. Finally, risk-mitigating characteristics are also taken into consideration in the financing structure, which can be incorporated through the utilisation of corporate finance, options, securitisation and insurance provisions amongst others.

Project bond financing, in particular has gained prominence as a viable and profitable method for raising project finance since the 1990s, especially after the Asian financial crisis where many affected countries in the region naturally turned to the bond market for a means to fund their projects, given the lack of opportunities available in the equity capital market and banking sector. However, banks still remain a natural source of financing for these projects, especially in the case of specialized development banks.

In terms of Government involvement and assistance, various grants are awarded in the use of constructing infrastructure, especially in cases where the Government aims to develop a new industrial area. Infrastructure has always been an imperative area of the country's development aims and thus a considerable proportion of the annual budget and public spending in the 5- year development plans is allocated for this purpose. Thus, it is observed that numerous public-private partnership projects are being set up for this purpose.

The following provides an overview of the various sources of financing available to infrastructure project finance.

Internal Funds

Internally generated funds are seen as the most straightforward method of obtaining project financing if available. Internal funds or 'capital already owned by the organisation' can be utilised without any negative effects on stock market prices and gearing commitments if a loan was to be taken. The use of internal funds can be seen as a 'signal' to competitors and other players in the market of the commitment the company has towards the particular project. However, as noted before, internal funds must only be used if the company is able to use this element in its balance sheets (i.e. ensure that prior debt commitments are taken care of etc). Internal funds are most commonly coupled with another form of financing such as equity or debt, which will be described below.

Equity Finance

In this case, the investors comprise mostly the parties directly or indirectly involved in the project, stock market proceeds (if public listed), institutional investors and investment funds. The equity investment represents a capital stake in the project and thus a share in profits (or losses) in the venture. Usually projects are financed with a combination of debt and equity, with a higher equity composition in the project financing where the risk involved is higher.

Below are the major private infrastructure projects from the early 1990s to the present that have accessed the equity and debt capital markets for their financing needs. As shown in Table 12, the majority of these projects fall under the telecommunications sector. Current project financing activities are focused on the water sector.

Table 12. Major Privatised Projects and Entities

Year	Sector	Project Name	Activity	Stock Exchange	Private Ownership
1990	Telco	Telekom Malaysia	Divesture	Local & Int'l	38%
1994	Telco	Digi Telecomm. Bhd	Greenfield	Local & Int'l	100%
1994	Telco	Maxis Comm. Bhd	Greenfield	Local	100%
1994	Telco	Time dotcom	Greenfield	Local	32%
1992	Energy	Tenaga Nasional Bhd. (TNB)	Greenfield	Local	n/a
1995	Energy	Petronas Gas Sdn Bhd	Divesture	Local	25%
1991	Transport	Jalan Cheras	Divesture	Local	100%
1995	Transport	Jalan Pahang	Concession	Local	n/a
1995	Transport	New East-West Link Expressway	Concession	Local	n/a
2000	Water	Johor Water Supply	Concession	Local	100%
2002	Water	Perbadanan Bekalan Air Pulau Pinang Sdn Bhd	Divesture	Local	35%

Source: PPI Database, World Bank

Debt Finance

This type of financing refers to the case when the borrower borrows a certain amount on which they must repay with additional interest payments to make up for the time value of money. This form of financing can be obtained from banks, insurance companies (and other institutional investors) or the debt capital market. In this case, the lender does not 'own' a part of the project (as opposed to an equity investor) and thus does not share in the upside or downside in the operation of the potential project.

Bonds

These financial instruments are interest-bearing (usually long-term) obligations issued to investors. They are characterised by a coupon rate and maturity date to which the bond is redeemed by the issuer. There is a public bond market where they are issued. If sold to institutional investors, these sales are deemed as private placements. Bonds, in some cases, are a more attractive means of debt financing than the conventional bank loan as they are a source of longer term funds and have better commercial terms.

Corporate Bank Loans

Usually, the banking institution to which the infrastructure company turns to will be the first resort in seeking a loan for a project as the bank would already be familiar with the company's activities and would be more willing to lend to them. However, financial appraisal and credit worthiness of the corporate borrower will still have to be assessed in any case. Large-scale infrastructure projects have been financed with domestic savings intermediated through the banking system. Corporate bank loans work most efficiently in a country where there is a high quantum of domestic savings and where the financial systems are predominantly market-based.

Grants

These are direct financial assistance provided mainly by government agencies and development finance institutions. They are a type of directed funding where the use of funds is very specific. These are used mainly for bigger development objectives of the party providing the grant. They can be used as a way to mitigate risk in undertaking a particular venture and also to assist in covering capital costs. It is important that the awarding of these grants to industry players does not distort the market in any way.

Government Budgets

Infrastructure projects have traditionally been financed by the Government due to their "public goods" nature (i.e. with marginal social benefits of the provision of the good or service exceeding the corresponding marginal social costs), thus it has always been accepted from a social viewpoint for public provision. Moreover, the innate characteristics relating to infrastructure projects (such as their long gestation periods, high incremental capital output ratios (ICORs), low returns and irregularity of capital), make infrastructure projects somewhat unattractive to private investors, unless sufficient steps in mitigating financial risks are taken. However, the task of financing these large-scale projects has not surprisingly added a considerable amount of fiscal stress on the government budget due to privatization and the advent of Private Financing Initiatives (PFI) to meet the country's infrastructure requirements.

Development Financial Institutions (DFIs)

DFIs such as the World Bank, Asian Development Bank and Japan Bank of International Cooperation (JBIC) have been actively involved in infrastructure development around the world, with JBIC taking the lead in terms of infrastructure financing by value in the Asia and Pacific region as at end-2003[1]. JBIC, in particular, has been integral in enabling high profile projects in Malaysia and in countries around the region to materialize. One such example of this is JBIC's involvement in the Shah Alam Expressway project which was tendered in the early 1990s. The process and the

[1] Global Development Finance – Harnessing Cyclical Gains for Development, 2004 – World Bank

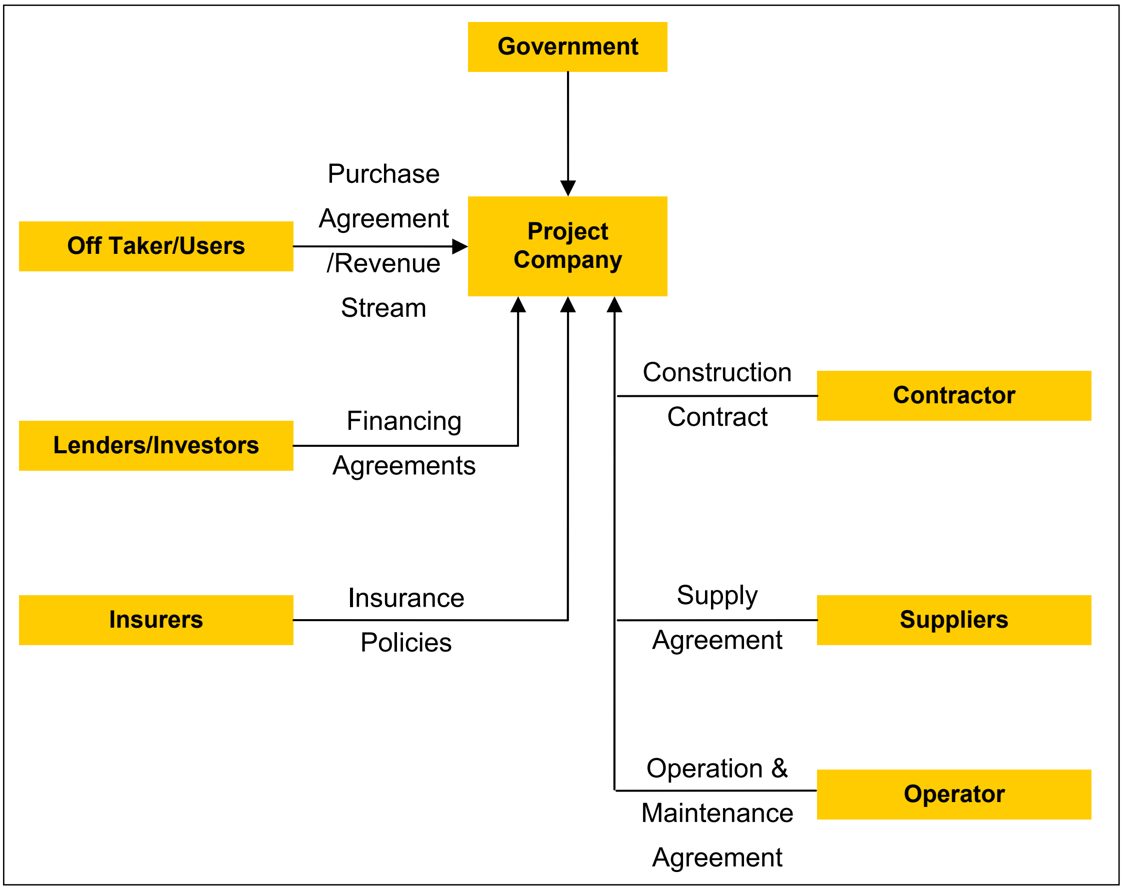
way that it was designed to promote private sector involvement was devised by JBIC. Its structure was so innovative as to not even require the utilization of a Government soft loan in its initial funding. Besides initiatives to develop funding mechanisms in developing countries, DFIs also provide essential sources of direct financing schemes in the form of loans and guarantees for infrastructure projects. This is the main form of DFI support that has been successfully employed in Malaysia.

4.2 Financing Features of Infrastructure Bonds

Most infrastructure financings in recent years have taken the form of project financing bonds. This is due to the very nature of raising funds for infrastructure where they are project-based (purpose-built asset), centered on a specific activity or objective with a limited project life-span. With regards to the project life-span, usually projects of this nature require long-term financing and thus the debt market is a rational avenue for this as bank loan terms are unable to match the longer period of financing that a long tenure bond is able to provide. Besides the long tenure, banks are also constrained by prudential rules on single customer limit and concentration risk given the large funding size that is typical of capital-intensive infrastructure projects.

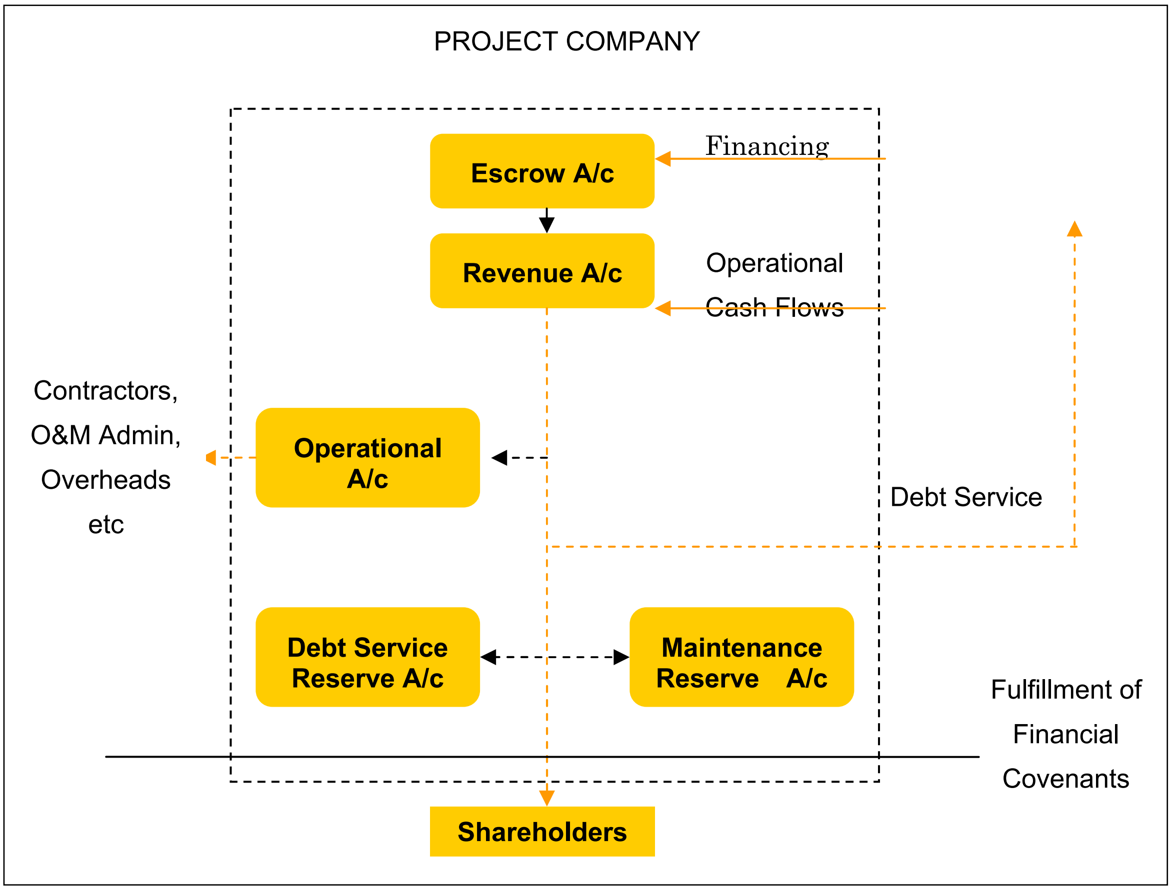
A project bond differs from a conventional corporate bond by certain legal and financial characteristics. With a project bond, the issue is used to finance a specific capital investment project which utilizes potential cash flows as the source of debt servicing; whereas a typical corporate bond is issued to raise funds for the general business activity or across the board expansion, where the issue is secured against the firm's general status of credit and underlying assets (which act as an implicit mechanism for diversification of risks for the investor). Risk is mitigated in a project bond issuance through effective allocation of repayment obligation to parties who are best suited to managing this risk (as illustrated below for a generic contractual framework for a project bond).

Figure 3. Project Financing - Contractual Framework



As observed in the above diagram, there are very conspicuous features of an infrastructure project bond issue and the way that the whole project is set up for the purpose of this issue. All the related parties in the project have a specific role purpose in the project structure and the nomination of the all these major participating parties is extremely significant in the project's overall success or failure. One very distinct feature of this kind of issue is the presence of an off-taker which will be the commissioning body of the finished infrastructure. It represents the institutional demand or original rationale for the project. This adds an element of certainty to this type of funding structure as the cash flows are relatively secure for obligors. On the other hand, the contractors and suppliers supporting the construction of the project need to be strong parties too as they are responsible for the completion of the revenue-generating source; without which, the purchase agreements would not be able to function and take effect.

Figure 4. Project Financing - Cash Flow Ring Fencing



The above diagram is a generic overview of the financing structure of a project and the various account entities which are utilized for their specific purposes. This is another distinct feature of a project financing scheme, that is, the 'cash flow ring fencing' arrangement. It enables a clear allocation of funds to their specific purpose which acts as a safeguard to satisfy the broad range of project expenses and financing repayments.

Besides the above, another defining feature of these types of bonds is that there is an explicit amount of time where the debt servicing component/revenue generating source will not be generating any cash flow. Typically, this is from the time of implementation of the project to the time of its completion. Even then, there is a period of time when debt repayments are scheduled to start, which could be quite a substantial period of time after the entity begins operations which is known as the 'ramp up period'. This case is seen mostly in toll road projects which have seen slow consumer uptake rates when first introduced into the market.

Lastly, infrastructure financing through bond issuance is more suited to projects with well-defined and certain cash flows and a bond market environment that is relatively stable. This characteristic can be enhanced by securing a contract with a credible (preferably state-owned) off-taker or making more conservative revenue projections in the case of toll road projects. Bond project financing also works well in markets characterized by little or absence of market and price competition and relatively inelastic demand. Thus, a less suitable market environment would be characterized by one which is highly dynamic and constantly changing through the advent of new technology (akin to the Telco industry) where continuous capital expenditure is required to keep abreast with changing trends. That is why the highly capital intensive utilities sector continues to be such an important part of the Malaysian bond market due to its relative stability and adherence to the characteristics that make it ideal for bond financing.

4.3 Description of 'Landmark" Infrastructure Project Bonds by Category

This section aims to illustrate the main features of infrastructure project financing (with emphasis on financing through bond issuance) through the use of identified 'landmark' deals in each sector. These deals will serve to exemplify how the infrastructure bond financing environment has changed over time and what the unique aspects of these structures are for the individual infrastructure sub-sectors. A detailed list of infrastructure bond issues can be found in the Appendix IV[2].

4.3.1 Power Sector

Since the signing of the first Power Purchase Agreement (PPA) in 1993 between the main off-taker, Tenaga Nasional Bhd (TNB) and the independent power producer (IPP), YTL Power Generation, IPPs have become a key segment of the country's electricity generation industry. The first batch of PPAs signed are referred to as the First Generation IPPs which enjoyed favourable payment terms in their PPAs. The average tariff of these First Generation entities was 15.5sen/kWh which remains the highest average over all the subsequent generations of IPPs in Malaysia.

The key features of the project and financing structure are described for the selected representative of each generation of IPP.

[2] The details of these 'Landmark' projects found in Section 4.3 are derived from official RAM Rationale documents and interviews with key Ratings Infrastructure analysts.

I. YTL Power Generation - 1st Generation IPP

Instruments	Fixed Rate Facility (1993/2008)	Medium-Term Notes Programme (2003/2014)
Issue Value (RM)	RM1.5 billion	RM1.3 billion
Ratings	AA 1 [Reaffirmed]	AA 1 [Assigned]
Maturity Date	14 November 2008	6 - 11 years from the issue date
Coupon Rate	10% per annum payable semi-annually in arrears on 30 June and 31 December	Floating rate
Lead Arranger	Commerce International Merchant Bankers Berhad	Aseambankers Malaysia Berhad
Trustee	Alliance Merchant Bank Berhad	Mayban Trustees Berhad
Security	First fixed and floating charge over all assets, accounts and undertakings of the Company, the assignment of all rights under the principal commercial agreements of the project and the assignment of insurance proceeds	Unsecured

Project Background

Under the PPA signed with TNB on 31 March 1993, YTLPG is to sell electrical energy exclusively to TNB for a period of 21 years from 30 September 1994, i.e. the date of commissioning of the first generating unit. Currently operating as base-load plants, both the Paka and Pasir Gudang power plants utilize combined-cycle gas turbine technology to generate electricity. Comprising 2 combined-cycle blocks for Paka and another one for Pasir Gudang, the power plants have a combined nominal capacity of 1,212 MW. Each block consists of 2 Siemens V94.2 gas turbines, 2 single-pressure heat-recovery boilers and 1 steam turbine.

Both power plants were completed ahead of schedule, with the first gas turbine generating unit successfully commissioned on 30 September 1994, i.e. 6 months ahead of the scheduled deadline. The last combined-cycle blocks in Pasir Gudang and Paka were commissioned on 23 September and 15 October 1995, respectively, and subsequently handed over to YTLPG in December 1995, some 11 months ahead of schedule. Construction of the power plants was awarded to a consortium comprising Siemens Aktiengesellschaft ("Siemens") from Germany and Syarikat Pembenaan Yeoh Tiong Lay Sdn Bhd, under a fixed-price lump sum turnkey contract, for approximately RM2.6 billion. The project did not incur any cost overruns.

Gas for the power plants is supplied by Petroliam Nasional Berhad ("Petronas") under the Gas Supply Agreement ("GSA") signed on 15 March 1993. The GSA, which will expire on 30 September 2015, is designed to match the expiry of the PPA. Meanwhile, operations and maintenance ("O&M") of the power plants are carried out by YTL Power Services Sdn Bhd ("YTLPS"), a wholly owned subsidiary of YTL Corp.

The combined-cycle gas turbine technology utilised by the power plants is well-proven, while the Siemens V94.2 gas turbines have been widely used since 1984. Both power plants have been running smoothly since the commencement of the combined-cycle operations in late 1995, with availability and heat rates (among other operating performance indicators) closely matching the expected levels.

The total funding requirements of the project (including construction, development cost, capital expenditure and interest during construction) came up to about RM3.7 billion. Funding needs were met by a combination of the bond, RM1.16 billion worth of floating-rate bank borrowings, equity in the form of RM60.00 million ordinary shares and RM240.00 million preference shares, as well as operational cash flow of RM778.00 million generated during the open-cycle phase of operations. Since its listing on the KLSE in 1997, YTLPI has advanced a total of RM1.16 billion to YTLPG for the refinancing of the latter's floating-rate bank loans.

The MTNs are to be used for the repayment of shareholder advances (RM400 million), and the repayment of commercial borrowings (RM900 million). The commercial borrowings comprising RM900 million of revolving credit facilities were drawn down to repay shareholder advances of a corresponding amount. This refinancing exercise forms part of the YTL Group’s policy of ensuring that its respective subsidiaries manage their own debts and do not have to rely on the parent, which in this case is YTLPI. The facility is expected to have maturity dates ranging from 6 to 11 years from the issue date, with issue amounts ranging between RM200 million and RM300 million.

Financial Covenants and Credit Enhancement Mechanisms

YTLPG’s debt-servicing ability has remained strong due to its robust cashflow that has been supported by its PPA. Backed by a strong operating cashflow of RM549 million in FY June 2006, its DSCRs (with and without cash balances) remained resilient at 2.08 times and 1.59 times, respectively. The Company also has a sound liquidity profile, supported by healthy profit accumulation and a larger cash balance of RM188.29 million as at end-June 2006. Looking forward, we expect YTLPG to maintain its stable operating cash flow of RM400 million - RM500 million a year, while its projected DSCR (without cash) is envisaged to remain in line with historical levels, i.e. at above 1 time.

Dividend payments by YTLPG are subject to distribution covenants under the bonds, therefore providing some comfort to bondholders. Before any distribution can be made to YTLPG's shareholders, the Company must first comply with the following distribution covenants:

(i) DSCR of at least 1.30 times before distribution.
(ii) A minimum Loan-Life Cover Ratio of 1.40 times at all times.
(iii) The balance in the Debt Service Reserve Account must not be less than the greater of RM77 million or an amount equivalent to the next 7 months' interest payments.

While the MTN does not have similar financial covenants, YTLPG is nonetheless expected to maintain a minimum DSCR of at least 1.25 times before declaring or paying any dividend or distribution to its shareholders, or prior to repaying/redeeming/repurchasing any shares.

II. GB3 Sdn Bhd – "2nd Generation IPP"

The second generation of IPPs experienced downward pressure on the tariffs specified in their PPAs, due to a move to establish a more competitive payment structure. Average rates for this generation of IPPs were within the range of 10 sen/kWh and 12 sen/kWh. Furthermore, more stringent requirements were imposed on these IPPs in order for them to claim full Capacity Payments (CPs) from the off-taker.

Instruments	RM850 million Senior Secured Al-Bai Bithaman Ajil Bond Facility (2001/2014)	RM350 million Senior Secured Al-Murabahah Commercial Papers/Medium-Term Notes Facility (2001/2008)
Ratings	AA2 [Reaffirmed]	P1/AA2 [Reaffirmed]
Maturity Date	19 December 2014	20 February 2009
Profit Margins	Between 6.50% and 8.00% per annum	Floating rate
Lead Arranger	Aseambankers Malaysia Berhad and Citibank Berhad	Aseambankers Malaysia Berhad and Citibank Berhad
Trustee	Malaysian Trustees Berhad	Malaysian Trustees Berhad
Security	(i) Charge over the project site. (ii) An assignment of the Security Accounts. (iii) An assignment of all contractual rights of theborrower under the Project Agreements. (iv) An assignment of all applicable insurances. (v) An assignment of the rights of the Borrower under any performance and warranty bonds and performance guarantees issued in favour of the Borrower. (vi) Step-in-rights and notice of assignment pursuant to the above-mentioned assignments. (vii) The Sponsor's pledge of the shares it holds in the Borrower.	

Project Details

GB3's power plant facility is constructed on approximately 66,000 m_2 of land, next to the existing SEV power plant in Lumut. The facility, which is actually divided into 2 phases, consists of an open-cycle phase (430 MW) which was commissioned in December 2001, and a combined-cycle phase which increased the plant's nominal capacity to 640 MW. The construction and installation of the facility had been awarded to Alstom Power Asia Pacific Sdn Bhd ("Alstom") under a RM1.108 billion fixed-price turnkey EPC contract executed on 10 October 2000. Alstom had been engaged to construct the facility and also the interconnection facility, which connects the plant to the national grid.

Although GB3 is among the second-generation IPPs built on a fast-track basis, the accelerated progress is only applicable to its OCGTs (i.e. the first 3 gas turbines). The construction period for the entire facility (up to the CCGT), which had earlier been anticipated to take 30 months, i.e. until end-January 2003, was completed 2 1/2 months ahead of schedule, i.e. mid-November 2002. A 30-month construction period would have been in line with other comparable CCGT plants such as SEV; this had allowed a commissioning and testing period of about 2 months prior to the Scheduled Commercial Operations Date ("SCOD") in January 2003. The RM1.38 billion construction cost of the project had been about 4.2% lower than the initial budget of RM1.44 billion. The cost savings had largely stemmed from GB3's significant buffer against contingencies, as well as reduced financing expenses (e.g. legal fees and debt arrangement fees).

GB3's PPA is the key document governing the underlying strength of its cash flow. Apart from spelling out the formula for power tariff calculation, it also clearly delineates all the terms and conditions to be met by GB3 in maximising tariff claims from TNB, the sole purchaser of its generating capacity and electrical energy. GB3 earns Capacity Payments (CPs) by ensuring the dependable capacity and availability of the power plant to TNB, and Energy Payments (EPs) by selling electricity to TNB. The CPs are structured to cover GB3's fixed operating costs and debt service, and to provide a reasonable rate of return to its shareholders. The CP structure in the PPA effectively protects GB3 against electricity demand risk. On the other hand, the EPs will cover actual fuel costs and variable operating costs associated with electricity generation.

As with the other second-generation IPPs such as Prai Power, TTPC and Pahlawan, the performance standards required under GB3's PPA to claim full CPs are more stringent compared to the first-generation PPAs. Similar to other second-generation

IPPs, GB3's CPs are calculated on a daily basis as opposed to monthly calculations for the first-generation IPPs. Under the PPA, GB3 will receive full CPs if its actual Daily Available Capacity ("DAC") equals or exceeds the planned DAC. The plant would also need to maintain an Unscheduled Outage Limit ("UOL") of not more than 4% per year to ensure full CPs. The CPs will be adjusted downwards by the fraction of the actual over planned DAC in the event the UOL exceeds 4%, but is still less than 6%. An additional penalty will imposed if the UOL exceeds 6%.

Financial Covenants & Credit Enhancement Mechanisms

Certain financial covenants that are in place to protect bondholders' interests as follows:-

- GB3 must maintain a debt-to-equity ratio of 90:10 at all times;
- The Company must maintain a minimum FSCR of 1.25 times at all times;
- GB3 cannot extend any loan or credit, save for a maximum of RM1 million for staff loans;
- Dividends can only be paid if GB3 meets the FSCR of 1.25 times after payment of the same;
- The finance service reserve account must always maintain a balance that is sufficient for all scheduled repayments of the PDS vis-a-vis the succeeding 6-month period.

Financial covenants allow GB3 to make hefty interest payments on Redeemable Unsecured Loan Stock.

Teknik Janakuasa Sdn Bhd ("TJSB"), the O&M operator for GB3, has a very reputable track record. Furthermore, TJSB provides the following guarantees to GB3, as shown in the table below :-

Guarantees	Requirements as per PPA	Amount of performance guarantee	Max Reimbursable amount (RM mil)
Unplanned Outage Rate (UOR)	UOL1=4% UOL=6%	RM 1.1Million per 1% deviation, up to UOR of 6% RM 2.2Million per 1% deviation from UOR of 7% to UOR of 10%	11
Availability Target	91.5% over a 3-year block	RM1 Million per 1% deviation up to a deviation limit of 4%	4
Tested Annual available capacity	640MW	RM1 Million per 1% deviation, up to a deviation limit of 8%	8
Guaranteed heat rate	As per schedule with corresponding load factor	Additional fuel cost incurred above the values set out in the PPA will be shared equally between GB3 and TJSB, up to a limit of RM4.4 Million for TJSB.	4.4
Maximum reimbursable amount (capped)			20

III. Jimah Energy Ventures – "3rd Generation IPP"

The most recent generation of IPPs can be considered as having more innovative PPA structures with respect to their financing structure. In these PPAs, the principle of demand risk sharing is introduced into the contracts. This involves the condition whereby only the portion of Capacity Payments relating to debt service will be guaranteed by the off-taker as opposed to the entire amount.

Instruments	Senior Islamic Medium-Term Notes Facility ("Senior IMTN") of up to RM4.85 billion	Junior Debt of up to RM895 million
Ratings	AA3(s) [Assigned]	Not rated
Maturity Date	1.5 - 16.5 years from date of issuance	Not rated
Profit Margins	Ranging from 7.25% to 9.85% per annum	30% per annum beginning 31 July 2009
Lead Arrangers	RHB Sakura Merchant Bankers Berhad; Bank Muamalat Malaysia Bhd; Malaysian International Merchant Bankers Berhad; AmMerchant Bank Berhad Babcock & Brown Asia Pacific (Financial Advisor)	
Trustee	Mayban Trustees Berhad	
Security	(i) Assignment over the Lease Agreement signed between JEV and Jalur Jernih Sdn Bhd ("Jalur Jernih"), and a first fixed charge over JEV's shares. (ii) Jalur Jernih (upon the acquisition of the latter). (iii) A first-ranking debenture comprising fixed and floating charges over all present and future assets of JEV. (iv) Assignment (by way of security) of all JEV's rights, titles and interests under the Project Documents, insurance, all permits and licences, liquidated damages and performance bonds/guarantees.	

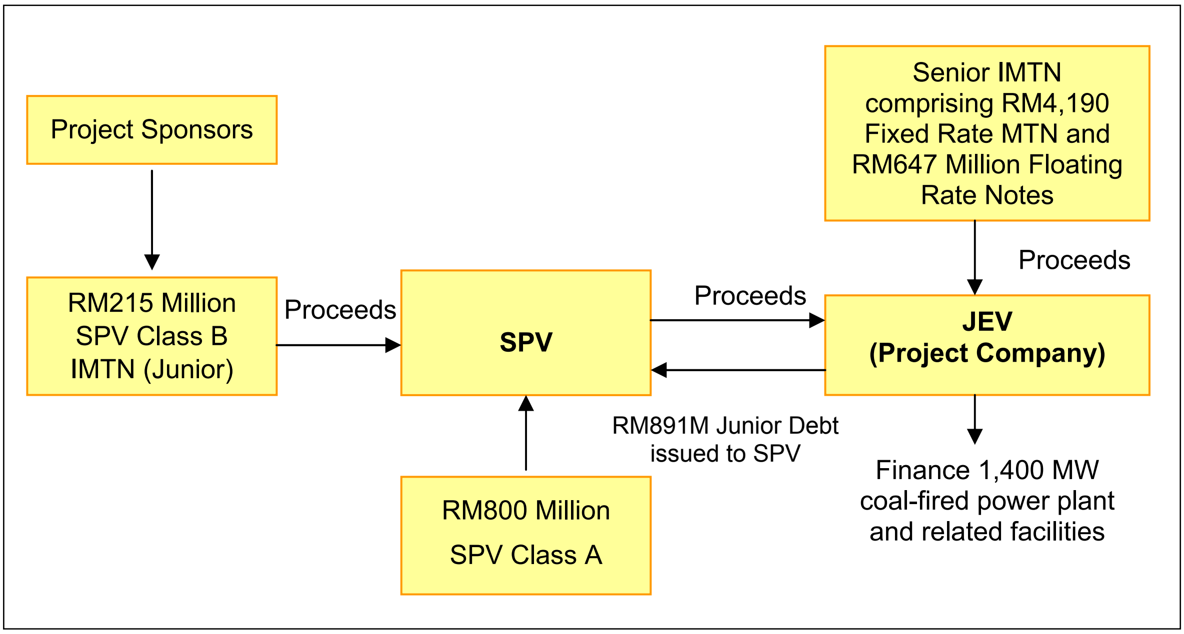
JEV's financial requirements during the construction period will be met by a combination of funds from shareholders, external debts and other sources. The funding for the entire project is estimated to come up to RM6.14 billion, some 61% of which comprises the construction cost of the power plant.

Table 13. Sources and Applications of Funds

Sources of Funds	RM'000	Application of Funds	RM'000
Equity – ordinary shares	5,000	Construction Cost	3,751,704
Junior Debt	890,799	TWA Works	390,000
Senior IMTN Programme	4,837,096	Land Acquisition	100,000
TWA Payment from TNB	390,000	Sales Tax and import duties on equipment	55,000
Interest Earnings from unutilized Senior IMTN proceeds	20,566	Insurance	92,518
		Other pre-operating expenses	275,607
		Financing-related expenses	139,033
		Construction Contingency and general contingency sum	101,829
		Coal and Oil inventory	75,303
		Senior IMTN coupon payments during construction	1,162,469
Total	**6,143,462**	**Total**	**6,143,462**

JEV will issue RM4.84 billion of Senior IMTN. Concurrently, JEV will also issue RM891 million of Junior Debt, to be subscribed by a trust-held, special-purpose company known as Special Power Vehicle Berhad ("SPV"). The SPV will issue up to RM800 million of Class A Islamic Medium-Term Notes and up to RM215 million of Class B Islamic Medium- Term Notes to subscribe to JEV's Junior Debt. The proceeds from the issuance of the RM4.84 billion Senior IMTN will fund 84% of the total development cost of the power project, while the proceeds from the RM891 million Junior Debt and common equity of RM5 million will finance the remaining 16% of the requirements. An adequate level of equity contribution during the construction phase of a project is important as it signifies the shareholders' commitment towards seeing the project to its successful completion. As mentioned, 16% of the project's funding is raised by SPV (mostly via the issuance of the Class A IMTN), which has no connection to the project sponsors. Given that the terms of the Class A IMTN contain more debt-like features, the project's debt-to-equity ratio stands at 96:4, which is deemed aggressive compared to the more conventional 80:20 structure.

Figure 5. Financing Structure



Financial Covenants and Credit Enhancement Mechanisms

JEV is viewed to have strong project economics, with a strong cash-generating ability underscored by favourable tariff rates under its power purchase agreement ("PPA"), in addition to its fixed-price, lump-sum turnkey Engineering, Procurement & Construction (EPC) contract. Fuel-supply risk is also well mitigated via the provisions of the Coal Supply and Transportation Agreement ("CSTA") while operating risk is deemed low, aided by experienced personnel and the expertise of Connell Wagner PPI ("CWPPI") through a Technical Support Agreement ("TSA"). The presence of these agreements serves to tighten the contractual obligations of the various parties in this project.

The Junior Debt is governed under the following terms and conditions, which enhance the credit profile of the Senior IMTN:

(i) The Junior Debt ranks second in terms of cash flow priority and security.

(ii) The Junior Debt shall not receive any profit payment and/or principal repayment if the requirements of the Financial Service Reserve Account ("FSRA") for the Senior IMTN, Maintenance Reserve Account ("MRA") and Debt-Equity ("DE") ratio have not been met.

(iii) The Junior Debt holders shall not be able to declare an Event of Default ("EOD") ahead of the Senior IMTN holders. However, in circumstances where the Senior IMTN holders declare an EOD in respect of JEV, it shall constitute a cross-default on the Junior Debt.

(iv) The Junior Debt shall not receive any profit payment and/or principal repayment if the Finance Service Coverage Ratio ("FSCR") for the Senior IMTN falls below 1.4 times before and after such payments are made.

In addition to the terms of the Junior Debt, the financing terms of the Senior IMTN contain the following standard covenants to strengthen JEV's debt-servicing quality:

(i) FSRA covering the next 6 months' debt service of the Senior IMTN (both principal and profit payments). The FSRA will be fully funded at all times and will be supported by TNB during the first 13 years of the COD, via the TNB SBLC.

(ii) RM24 million MRA to be built up over a period of 3 years from the commercial operations of Unit 1.

(iii) Payment of dividends, advances and repayment of Junior Debt obligations to be subject to an FSCR test of 1.4 times, on a post-payment basis.

(iv) Maximum DE ratio of 85:15.

Table 14. Designated Accounts of JEV to Ensure Proper Cash Flow Discipline

Accounts	Uses
Senior IMTN Escrow Account	Payment to the Project Bank Account subject to maintaining the D/E Ratio of 85:15
Project Bank Account	Repayment of bridging facility of up to RM300 Million prior to the issuance of the Senior IMTN, payment of all capital expenditure, contingency amounts, principal and profit payments of the Senior IMTN as well as payment into the FSRA, MRA, TA and OA.
Financial Service Reserve Account	Payment of principal and profit for the Senior IMTN
Maintenance Reserve Account	Payment of maintenance expenses for the Project
Transmission Works Agreement	Payment for all works under the TWA
Operating Account	Payment of capital expenditure, operating and maintenance, taxes, duties and capital improvements in respect of the Project
Performance Guarantee Account	Reimburse EPC contractor if rectification of failure is made (during warranty period).

IV. Mukah Power Generation Sdn Bhd - Islamic Finance

Instruments	Senior Sukuk Mudharabah Programme of up to RM665 million (2006/2021)	Junior Sukuk Mudharabah Programme of up to RM285 million (2006/2031)
Ratings	AA3 [Assigned]	A2 [Assigned]
Maturity Date	Up to 15 years from the date of first issuance	Up to 25 years from the date of first issuance
Profit Margins	7.55% - 8.65% per annum, payable semiannually	12.00% - 168.50% per annum, payable semiannually
Lead Arranger	RHB ISLAMIC Bank Berhad	
Trustee	Amanah Raya Berhad	
Security	(i) Assignment of all of MPG's rights, titles and interests under the Project Documents, insurance policies as well as all permits and licences. (ii) A letter of undertaking from MPG for the assignment of all of MPG's rights, benefits and titles under any supplementary agreements that may arise from the Project Documents. (iii) Memorandum of First Legal Charge over the Designated Accounts and assignment of MPG's rights, benefits and titles to any money in the credit balance of the Designated Accounts. (iv) First-ranking debenture creating fixed and floating charges over MPG's present and future assets.	

Project Background

The purpose of the Senior Sukuk and Junior Sukuk is to finance partly the construction of a 270-MW coal-fired power plant together with related ancillary facilities, profit payments during the construction period and the first profit payment upon completion of the plant, pre-operating expenses as well as other project costs.

Financing Structure

Mukah Power Generation (MPG) will issue the RM665 million Senior Sukuk and RM210 million of the Junior Sukuk to fund a respective 76% and 24% of the total project-development cost. The balance will be financed via shareholders' funds (ordinary shares) and interest income during construction. The Junior Sukuk will be subscribed to by Sarawak Power Generation (SPG), as part of Sarawak Enterprise Corporation Berhad's (SECB's) equity contribution to the Project. On the other hand, SPG will issue RM215 million of Serial Sukuk Musyarakah to part-finance the subscription of MPG's Junior Sukuk. The Junior Sukuk facility allows MPG to issue up to RM285 million (additional RM75 million) as an additional liquidity buffer to cater for unforeseen cost overruns as well as to cover profit payments in the event of a delay in completion. The subscription of this remaining portion of MPG's Junior Sukuk will be funded by a separate cash reserve in SPG, which will be built up over 2 years, i.e. upon the scheduled completion of the Project.

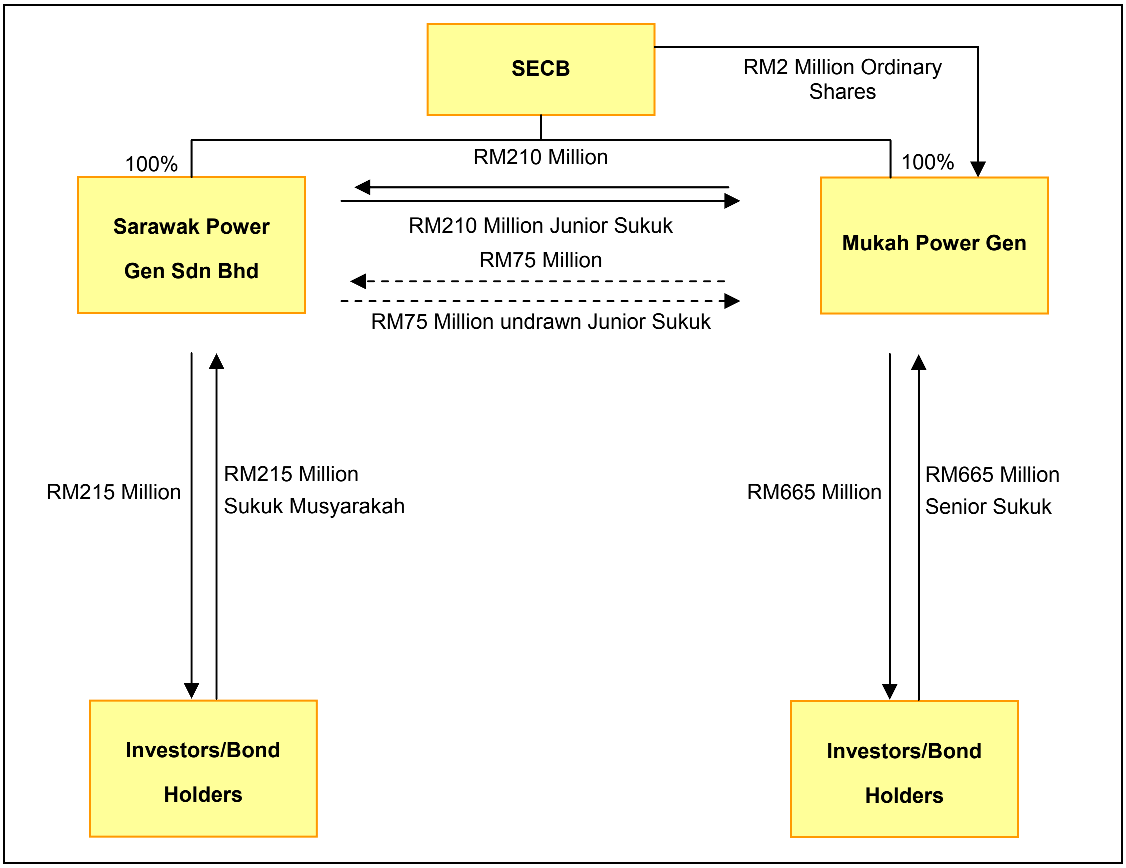
The RM75 million cash reserve in SPG will be fully funded. Should the remaining RM75 million Junior Sukuk be issued by MPG, its profit and principal repayments will only commence after the final maturity of the initial RM210 million Junior Sukuk. Details of the sources and uses of funds are presented in Table 15.

Table 15. Sources and Applications of Funds

Sources of Funds	Value (RM million)	Application of Funds	Value (RM million)
Equity – ordinary shares	2.0	EPC[3] for Plant Zone	667.33
Senior Sukuk proceeds	665.00	EPC for Non-Plant Zone	36.1
Junior Sukuk proceeds	210.00	Land Acquisition	2.00
Permitted Investment Income	0.13	Advisory & Insurance	4.00
		Pre-operating expenses	11.00
		Project Management & Admin	7.00
		Field investigations	1.20
		Issuance Expenses	1.60
		Financing Cost during construction	103.71
		Initial Funding Senior Sukuk Debt Reserve	27.01
		Contingency	16.18
Total	**877.13**	**Total**	**877.13**

[3] Engineering, Procurement & Construction

Figure 6. Financing Structure



Financing Covenants and Credit Enhancement Mechanisms

The following are some of the terms and conditions of the Junior Sukuk that would help strengthen the credit position of the Senior Sukuk issue:

(i) The principal redemption of the Junior Sukuk will only commence after the Senior Sukuk has been fully paid off.

(ii) The Junior Sukuk will only receive profit payments after the obligations of the Senior Sukuk and the requirements of the Sukuk Payment Account ("SPA") have been fully met. MPG is required to maintain a minimum SPA balance that is equivalent to the Senior Sukuk's principal and profit payments over the next 6 months, so long as the Senior Sukuk remains outstanding.

(iii) The Junior Sukuk ranks second in terms of cash flow priority and security. It serves as a loss-absorption piece to the Senior Sukuk, i.e. it would bear the brunt should there be any shortfall in MPG's cashflow.

(iv) The Junior Sukuk is not supported by any debt service reserve account.

(v) The Junior Sukukholder (i.e. SPG) shall not declare an Event Of Default (EOD) ahead of the Senior Sukukholders. However, in circumstances where the Senior

Sukukholders declare an EOD in respect of MPG, it shall constitute a cross-default on the Junior Sukuk.

(vi) Failure on MPG's part (due to insufficient cash flow) to meet the Junior Sukuk's profit payments does not constitute an EOD, and such payment obligations are non-cumulative.

(vii) The Junior Sukuk will be subscribed by SPG as part of SECB's equity contribution to the Project. SPG will also undertake to retain full ownership of the Junior Sukuk during the construction period of the plant.

In addition to the terms of the Junior Sukuk, the financing terms of the Senior Sukuk contain the following standard covenants to strengthen MPG's debt servicing quality:

(i) Payment of dividends and advances to shareholders to be subjected to:
- An SSCR test of 1.6 times on a post-payment basis (during the tenure of the Senior Sukuk).
- A Junior SSCR test of 1.3 times on a post-payment basis (during the period post-payment of the Senior Sukuk).
- Maintaining the minimum SPA balance requirement.

(ii) Creation of several designated accounts to ensure proper cashflow discipline. However, the financing terms do not stipulate the maintenance of a certain debt-to-equity ratio in MPG's capital structure prior to the distribution of dividends and advances to shareholders.

4.3.2 Water Sector

The water sector has historically encountered a high level of fragmentation attributable to the decentralised approach of water supply in the country, that is, with each state responsible for its own water supply activities. In order to improve the state of water supply distribution in the country, the Government awarded the privatisation of the Selangor water distribution system to Syarikat Bekalan Air Selangor Sdn Bhd (SYABAS) in 2003; which is the primary off-taker for the different water concessionaires around the country.

Syarikat Pengeluar Air Sungai Selangor Sdn Bhd (“SPLASH”)

Instruments	RM1,407 million Al-Bai Bithaman Ajil Debt Securities Issuance Facility (2000/2016) (“BaIDS”)	RM435 million Floating Rate Notes (2000/2006) (“FRN”)
Ratings	AA3	AA3/P1
Maturity Date	10 series maturing between 7 and 16 years from 19 January 2000	72 months from 21 November 2000
Interest Rates	3.50% - 8.25% per annum	Floating
Lead Arranger	Commerce International Merchant Bankers Berhad	
Trustee	Malaysian Trustees Berhad	
Security	1) First fixed and floating charge over SPLASH’s assets. 2) A charge over the Operating Account, Debt Service Reserve Account, BaIDS Escrow Account and monies standing to the credit of SPLASH. 3) SPLASH’s contractual rights under the project agreements. 4) An assignment of insurance policies. 5) An assignment of the performance and warranty bonds and performance guarantees issued in favour of SPLASH, subject to the rights and interests of the Selangor State Government under the Privatisation Agreement.	

Project Background

SPLASH is a single-purpose company established to undertake the privatisation of the operation and maintenance (“O&M”) of the existing Phase 1 water-treatment facilities in Bukit Badong, Selangor (“SSP1”), as well as the construction and O&M of Phase 3 of the Sungai Selangor water-supply scheme (“SSP3”). The said projects involve the treatment of raw water as well as the supply and sale of treated water to the SSG for a period of 30 years, commencing 24 January 2000 (“the effective date”), which coincides with the signing of the PA between the abovementioned parties. The construction of the Project, costing RM2.146 billion vis-a-vis the cost of the engineering, procurement and construction contract, had been carried out by a joint-venture company formed by Gamuda (70%), KDEB (15%) and TSWA (15%), also known as “GTKJV”.

On 24 September 2003, the Government awarded the privatisation of the Selangor (including the Federal Territories of Kuala Lumpur and Putrajaya) water distribution system to Syarikat Bekalan Air Selangor Sdn Bhd (SYABAS) in which the Federal Government has a Golden share in. SYABAS is thus the primary off-taker of SPLASH.

SPLASH is protected from demand risk by virtue of the fixed capacity charges (“CCs”) it earns regardless of the quantity of water supplied. Moreover, SPLASH is not subject to any performance standards in qualifying for full CC payments. However, they are required to meet the quantity of water demanded by its sole-offtaker SYABAS - within the quality standards set out in the Privatisation Agreement; in return it will earn supply charges (“SCs”).

Financing Structure

The entire project is budgeted at RM2.9 billion along with additional expenses during construction. These, in addition to the construction work and land-related expenses, will be financed via a combination of debt, equity and internal funds. The debt portion will comprise the Al-Bai Bithaman Ajil Debt Securities ("BaIDS") BaIDS and Floating Rate Notes, while the equity component will be met by the ordinary shares as well as the Redeemable Unsecured Loan Stock issued to the shareholders. Part of the project will also be supported by funds generated from the operations of SPLASH, notably water supply from SSP1.

Table 16. Sources and Applications of Funds

Sources of Funds	RM Million	Application of Funds	RM Million
Internally Generated Cash	841	Construction Cost	2,146
Equity	474	Start-up Expenses	90
External Debt	1,635	Land & Re-Settlement Costs	190
		Interest during Construction	524
Total	**2,950**	Total	**2,950**

As at end-June 2003, the total cost incurred for the project amounted to RM2 billion. This has primarily been met by the further drawdown of the BaIDS (from the escrow account) and FRN, which collectively amounted to RM1,460 million. The rest of the project cost has been met by funds from the shareholders (in the form of ordinary shares and Redeemable Unsecured Loan Stock) and, to a lesser extent, collections from the State Government. The disbursement of funds from the State Government was slow to begin with and as a result, SPLASH faced considerable financial difficulty in 2003 especially. This led to SPLASH seeking alternative sources of funding as an interim measure. The alternative form of funding came from a RM180 million revolving credit facility ("RC") from several banks.

Since the restructuring of the Selangor water industry in 2004, SPLASH's liquidity position has improved; as at end-FY March 2006, the company's collection and payment cycles came up to around 90 days and 21 days, respectively. This is a substantial improvement from the previous high of 594 days (receivables) and 671 days (payables). The healthier payment trend, as well as the settlement of a portion of SPLASH's old receivables, had allowed the company to pare down its debts and payables.

Financial Covenants and Credit Enhancement Mechanisms

Although the dividend payments and interest on SPLASH's redeemable unsecured loan stock ("RULS") are subordinated to and subject to the distribution covenants under the BaIDS, the Company's covenants are less stringent than those of the other project-financed issues. While most of these transactions have to meet a post-distribution DSCR requirement - thus guaranteeing a certain level of debt coverage subsequent to any distributions to shareholders - SPLASH's structure does not provide for such a condition. In this respect, given the Company's strong project economics, robust cash flow profile and improved liquidity position, SPLASH is in the financial capacity to meet these covenants and make distributions. Nevertheless, SPLASH's yearly operating cashflow is believed to sufficiently cover its annual debt.

As Capacity Charges (CCs) are earned regardless of the quantity of water requested by its sole off taker, i.e. SYABAS, SPLASH is insulated against fluctuations in demand. The CCs have been structured to cover debt servicing, overheads and a portion of O&M costs (not covered by SCs) as well as to provide a reasonable rate of return to shareholders. Moreover, unlike independent power producers, which will only earn full capacity payments upon meeting the operational requirements under their power purchase agreements, SPLASH's PA does not have such stipulations in order to earn full CCs. The stable and predictable CCs that are earned regardless of the quantum of water supplied acts as a credit enhancement mechanism for the SPLASH structure.

4.3.3 Transport - Toll Road Sector

Projek Lebuhraya Utara-Selatan Berhad ("PLUS")

Instruments	RM5.10 billion Bai Bithaman Ajil Islamic Debt Securities	RM2.26 billion Bai Bithaman Ajil Islamic Debt Securities
Ratings	AAA [Reaffirmed]	AAA [Reaffirmed]
Maturity Date	Between 1 and 15 years from 31 May 2002	Between 8.5 and 14 years from 20 December 2002
Profit Margins	Between 3.4% and 7.5%	Not Applicable
Lead Arranger	RHB Sakura Merchant Bankers Berhad; Dallah Albaraka (M) Holdings Sdn Bhd; KAF Discounts Bhd; Bank Mualamat (M) Bhd	RHB Sakura Merchant Bankers Berhad
Trustee	Universal Trustee (M) Berhad	
Security	An assignment and charge over the Toll Amounts, Credit Balances and all project accounts ; an assignment of the rights over the Concession, Construction Guarantees (other than the Performance Bonds), Construction Contracts and Insurance; a debenture over the fixed and floating assets of PLUS; an assignment over PLUS's rights, titles and interests in the Additional Project Agreements; and an assignment (ranking second after the Government) over the Performance Bonds and the Performance Bonds Proceeds Account.	Assignment over not more than RM400 million of the excess cash flow proceeds per calendar year, as specified by the auditors in respect of the period commencing 1 January 2011 to 31 December 2015, and RM260 million for the period commencing 1 January 2016 to 31 December 2016 ("the Charged Amounts"); and a charge over the security account into which the Charged Amounts will be deposited.

Project Background

PLUS is a single-purpose company established on 27 June 1986, to undertake the part-construction, operation and maintenance of the Expressways. It is the highway concessionaire for the 772.0-km North-South Expressway ("NSE"), the 34.8-km New Klang Valley Expressway ("NKVE"), the 15.9-km Federal Highway Route 2 between Subang and Klang, and the 22.75-km Seremban-Port Dickson Highway ("SPDH") (collectively known as "the Expressways").

The Concession Agreement ("CA") for the Expressways had been originally awarded to PLUS's intermediate holding company, United Engineers (Malaysia) Bhd ("UEM"), which subsequently novated it to PLUS on 20 July 1988. The Expressways have been fully operational since February 1994. Besides collecting toll from the Expressways' users, PLUS also generates revenue from certain ancillary facilities such as billboard advertising and leasing of land to petrol stations as well as renting out food and beverage stalls in the rest and service areas.

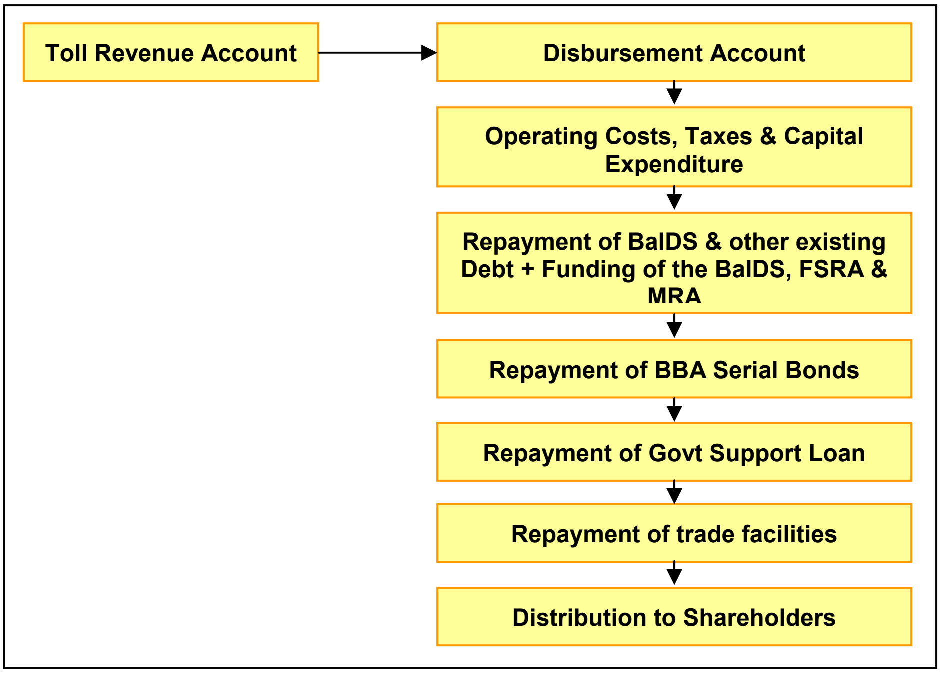
The CA had been originally awarded for a period of 30 years, commencing 31 May 1988 (being the date on which the CA came into effect) and expiring on 31 May 2018. In 1999, however, the Government agreed to extend the concession period for a further 12 years to 31 May 2030, via a Supplemental Concession Agreement ("SCA") inked on 8 July 1999. The extension had been to compensate PLUS for the overall reduction in agreed toll rates under the revised tariff structure so that the Company's net earnings would not be affected. Additionally, the SCA had also established a toll-sharing formula between PLUS and the Government, for any toll revenue exceeding the annual thresholds set out in the SCA.

Financial Covenants and Credit Enhancement Mechanisms

Notwithstanding PLUS's robust cash-generating ability, it is also important to ensure that the Company's healthy cash flow is properly applied to meet all its financial obligations. The establishment of a financial 'waterfall' (as seen below), detailing the priority of payments, provides the necessary financial discipline on PLUS. The covenants require the Company, among others:

- To maintain a minimum FSCR of at least 2.75 at all times.
- Not to incur any further debts or give any guarantees other than its existing debts, the unsecured RM3.0 million Bank-Guaranteed Facility and unsecured RM5.0 million Trade Facilities (currently within the limit of the RM50.0 million Overdraft Facility), and any additional subordinated debt from the Government.
- No declaration or payment of dividends if the FSCR is less than 3.0 times.

Figure 7. Cash Flow Waterfall - Priority of Payments



In addition to the financial covenants above, the cash flow-monitoring structures in place for the BaIDS and BBA Serial Bonds are also satisfactory on a credit perspective. The Company is also obligated to set aside a 1-year finance service payable and projected capital expenditures for the Finance Service Reserve Account ("FSRA") and Maintenance Reserve Account ("MRA"), respectively, for the BaIDS. The presence of these accounts provide further comfort about PLUS's ability to weather any short-term liquidity shocks which may impair its ability to service its debts or carry on the normal course of its business.

Following the successful completion of PLUS's debt-restructuring exercise in May 2002, the Company's erstwhile crippling debts of RM16.48 billion were reduced to RM7.22 billion as at 31 December 2002. In addition to PLUS's cleaner post-restructuring balance sheet, the exercise had also addressed the issue of inter-company loans that had previously been a concern.

Subsequently, PLUS issued the BBA Serial Bonds in December 2002 to refinance its obligations under its RM3.82 billion Nominal Value Unsecured Zero Coupon Serial Bonds ("Linkbonds"), in order to realise significant interest cost savings. In general, both the debt-restructuring and refinancing exercises resulted in vastly superior debt service coverage ratios ("DSCRs") for the Company.

This restructuring exercise also saw the lengthening of PLUS's debt repayment tenure to 15 years via the BaIDS, further boosting its debt-servicing ability. Furthermore, the refinancing exercise for the Linkbonds has also resulted in sizeable interest savings for PLUS of up to RM1.5 billion. In FY 2002 itself, PLUS's financing costs were trimmed by RM261.5 million to RM496.0 million.

Expressway Lingkaran Tengah Sdn Bhd (ELITE)

Instrument	RM800 million Al-Bai Bithaman Ajil Islamic Debt Securities (2003/2015)
Rating	AA2 [Upgraded]
Maturity Date	10 tranches maturing between 28 February 2006 and 27 February 2015
Profit Margins	Between 5.5% and 8.0% per annum, payable semiannually
Lead Arranger	Amanah Short Deposits Berhad
Trustee	Universal Trustee (M) Berhad
Security	(i) An assignment and charge over the toll amounts, credit balances and all project accounts (excluding cash belonging to Projek Lebuhraya Utara-Selatan Bhd). (ii) An assignment of all of ELITE's rights, interests, titles and benefits in and to the Concession Agreement, Supplemental Concession Agreement, Second Supplemental Concession Agreement and Project Documents. (iii) A debenture over the fixed and floating assets of ELITE. (iv) An assignment over all the relevant insurance policies taken up by ELITE. (v) An assignment (ranking second after the Government of Malaysia over the Performance Bonds and the Performance Bonds Proceeds Account.

Project Background

ELITE is a single-purpose vehicle established on 24 August 1994, to undertake the construction as well as the operation and maintenance ("O&M") of the 48-km North-South Expressway Central Link (NSECL). The Concession Agreement ("CA") had originally been awarded to ELITE's parent company, United Engineers (M) Berhad, which subsequently novated it to ELITE on 27 January 1995.

The NSECL serves as a primary link between northern Klang Valley and KLIA. The expressway, which operates through a "closed" tolling system (i.e. Vehicles are charged according to the distance traveled), had been opened in 2 phases; the first northern-most 9.8 km on 16 December 1996, with the remaining 38 km on 16 October 1997. The project was completed at a cost of around RM1.4 billion.

Financing Structure

In 1995, ELITE raised RM840 million comprising its RM440 million Notes Issue Facility ("Notes") and RM400 million Bonds Issue Facility ("Bonds") to fund the construction work on the NSECL. Subsequently, in 1997, ELITE obtained a RM100 million bridging loan facility ("BL") from the former Bank Bumiputra (M) Berhad, to finance the construction of the Additional Expressway. However, due to economic pressures, ELITE missed its interest payments in July 1999, resulting in a downgrade of the ratings for the Notes and Bonds, to D.

ELITE's problems at that point were a result of several factors that can be traced back to the Asian financial crisis in 1997/98. The delay in the opening of KLIA due to the economic downturn, and the subsequent shifting of some of the domestic flights from KLIA back to Subang Airport, resulted in weaker traffic volumes than initially projected. Further aggravating ELITE's precarious financial position then were the high interest rates that eroded its cash resources - interest expense on its floating rate obligations jumped by almost RM25 million in 1998.

When the Notes and Bonds were downgraded to D in July 1999, ELITE was granted indulgence by its lenders to enable the Company to sort out its cash flow problems. Finally, through a deal brokered by the Corporate Debt Restructuring Committee, ELITE finalised its Debt Settlement Scheme (DSS) in March 2002. In this DSS, ELITE proposed a refinancing exercise to repay the entire RM1,050.43 million via the issuance of the proposed RM800 million BaIDS and the RM300 million Additional Government Loan (AGL) granted to ELITE as part of the compensation for the proposed revamp of the Company's toll rate structure under a revised Concession Agreement.

The Government's approval of the RM300 million AGL, inter alia, is a condition precedent to the drawdown of the proposed RM800 million BaIDS. After the settlement of the entire RM1,050.43 million debt, ELITE will have an excess of RM30.30 million - RM27.90 will be deposited into the FSRA, and the remaining RM2.40 million into the Revenue Account for operations and/or capital expenditure ("capex") requirements.

Financial Covenants and Credit Enhancement Mechanisms

The covenants imposed under ELITE's financing structure are among the most stringent for project finance cases in Malaysia. The main covenants found in the ELITE financing structure are as follows:-

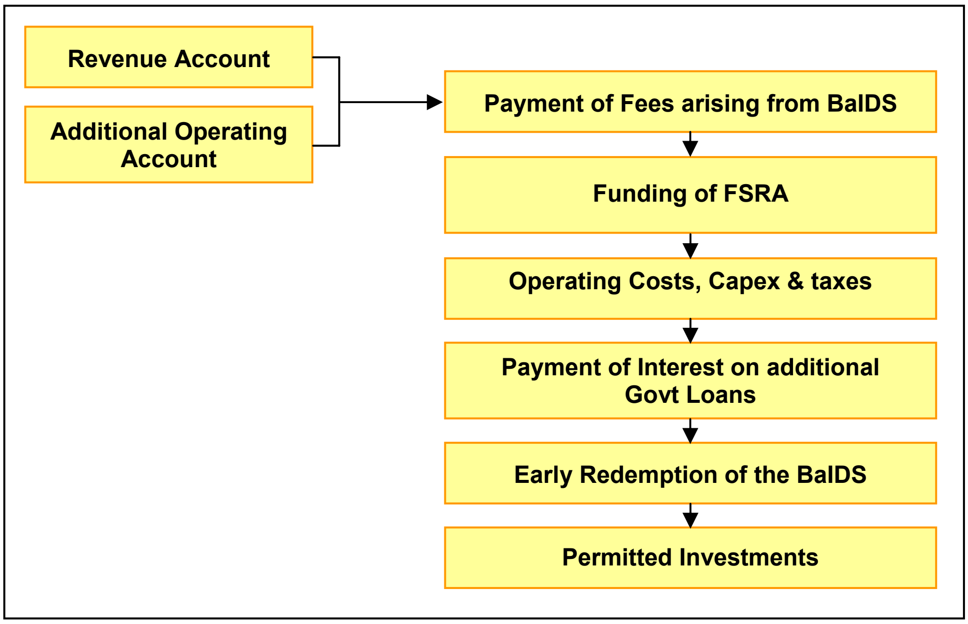
(i) Minimum finance service cover ratio of at least 1.5 times throughout the tenure of the Bonds.

(ii) ELITE shall not declare or pay out any dividend or make any other distribution in or in respect of its share capital.

(iii) ELITE will not incur, assume, guarantee or permit to exist any debt except for its debt under the Bonds and the RM300 million loan from the Government of Malaysia.

(iv) ELITE must ensure that the cash balance in its Finance Service Reserve Account is equivalent to the next 6 months' principal and profit obligations at all times.

Figure 8. Cash Flow Waterfall - Priority of Payments to BaIDS holders



One of the primary factors that caused ELITE to default on its financial obligations back in July 1999 was the floating interest rates on the Notes, which skyrocketed to 18% on two occasions, in 1997 and 1998. However, with the fixed-rate nature of the BaIDS, interest rate risk eliminated.

Besides the financial covenants restricting the outflow of cash to shareholders, the proposed BaIDS are also structured with a 6-month FSRA. The presence of such an account provides further comfort on the Company's ability to weather any short-term liquidity shocks.

In terms of risks, toll rate revision risk has always been recognized as one of the major operating risk factors faced by all toll concessionaires in Malaysia. However, this concern has now been largely laid to rest with the signing of the Third Supplemental Concession Agreement (SCA), as the quantum of increase for the New Toll Rate is more reasonable compared to the previously proposed toll rate increases. Furthermore, the Government has been highly supportive of Toll operations and has agreed to gazette ELITE's New Toll Rate over the entire concession period. Currently, all toll rate hikes have to be approved by the Government prior to the implementation of each scheduled increase. This means that ELITE will be able to automatically raise toll rates on the scheduled dates without having to seek the Government's approval each time. The Government has also agreed to compensate ELITE for the loss of revenue beginning 1 January 2002 until the implementation date of the New Toll Rate.

4.3.4 Educational Facilities

Encorp Systembilt Sdn Bhd

Instrument	RM1,321.60 million Al-Bai Bithaman Ajil Notes Issuance Facility (2000/2018) "Tranche 1"	RM510 million Al-Bai Bithaman Ajil Notes Issuance Facility (2000/2018) "Tranche 2"	RM250 million Al-Bai Bithaman Ajil Notes Issuance Facility (2002/2028) "Tranche 3"	Proposed RM683.30 million nominal Al-Bai Bithaman Ajil Notes Issuance Facility (2004/2028) "Tranche 4"
Rating	AA2(s)	AA2(s)	AA2(s)	AA2(s)
Maturity Date	The notes are issued in 32 series of RM41.3 mil each, maturing every 6 mths from 3 July 2002. The last series will mature on 3 Jan 2018.	The notes are issued in 34 series of RM15 mil each, maturing every 6 mths from 15 Mar 2002. The last series will mature in Sept 2018.	Series 1: RM30 mil in 2007 Series 2: RM30 mil in 2012 Series 3: RM30 mil in 2017 Series 4: RM70 mil - amortised in 5 equal annual instalments from 2018 to 2022 Series 5: RM90 mil – amortised in 6 equal annual instalments from 2023 to 2028	The notes will be redeemed annually from the 15th anniversary of issuance date. Series 1 to 5: RM68.33 million each Series 6 to 7: RM102.495 million each Series 8: RM136.66 million each
Lead Arranger	Deutsche Bank			UOB (Malaysia) Bhd
Trustee	PB Trustee Services Bhd			

Security:

Tranche 1

1) Assignment of concession payments for 6,094 units and associated additional works on 6,094 units under Stages 2 and 3 of the Privatisation Agreement ("PA").
2) Assignment of the corporate completion guarantee for Stages 1, 2 and 3 from Leighton Holdings (Australia) Limited, the Main Contractors.
3) Assignment by Encorp Construct Sdn Bhd ("ECSB") of the completion guarantee, amounting to 9% of the outstanding construction contract sum for 6,094 units under Stages 2 and 3, from Leighton Contractors Malaysia Sdn Bhd ("LCMSB") and backed by Malayan Banking Berhad.
4) Charge and assignment of the Tranche 1 Escrow Account under Stages 2 and 3.

Tranche 2

1) Assignment of concession payments for 2,800 units under Stage 1 of the PA.
2) Charge and assignment of the Tranche 2 Escrow Account under Stage 1.
3) Assignment of the construction contracts by ECSB in relation to Stage 1.

4) Assignment by ECSB of any security granted in relation to Stage 1 of the privatisation project by the contractors, with the exception of those already granted to the noteholders of the RM1,321.6 million Al- Bai Bithaman Ajil Notes ("ABBA") and the RM250.0 million ABBA.

Tranche 3

1) Assignment of concession payments for 1,106 units under Stages 2 and 3, the associated additional works for 1,106 units and additional works for 2,800 units under Stage 1 of the PA.
2) Assignment of the corporate completion guarantee for Stages 1, 2 and 3 from Leighton Holdings (Australia) Limited.
3) Assignment by ECSB of the completion guarantee, amounting to 9% of the construction contract sum for 1,106 units under Stages 2 and 3, from LCMSB and backed by Malayan Banking Berhad.
4) Charge and assignment of the Tranche 3 Escrow Account.

Tranche 4

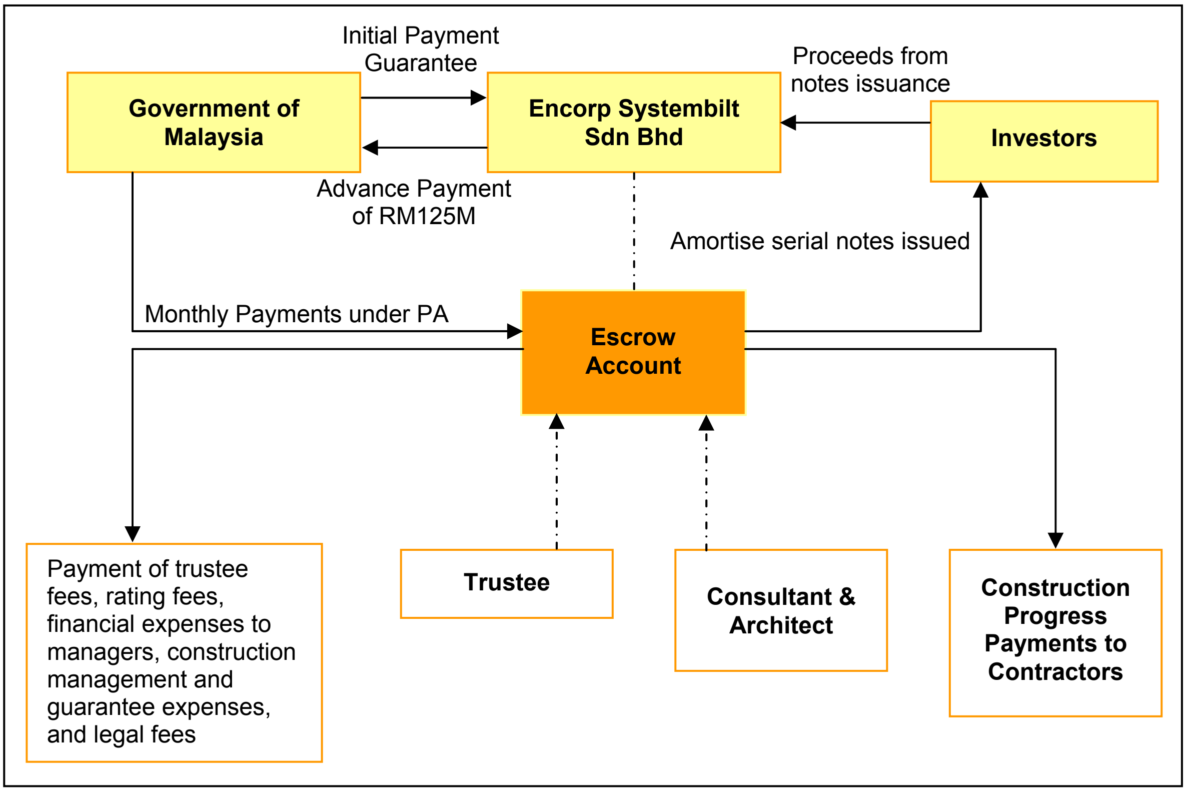
1) Assignment of concession payments for the respective 6,094 and 2,800 units currently under Tranches 1 and 2.
2) Charge and assignment of Tranche 4 Escrow Account.

Project Background

Encorp Systembilt Sdn Bhd (ESSB) is the concessionaire for the privatisation of 10,000 units of teachers' quarters throughout the country, based on the build-and-transfer concept. Under the 30-year concession, ESSB is to design, finance, construct and deliver 10,000 units of teachers' quarters to the Government of Malaysia ("GOM"). In return, the GOM would make monthly payments to ESSB throughout the concession period, starting from the month following the certification of practical completion of each cluster of the teachers' quarters. The main contractors of this project are Leighton Contractors Malaysia Sdn Bhd ("LCMSB").

Financing Structure

Figure 9. Cash Flow Diagram for Al-Bai Bithaman Ajil (ABBA) Facilities



The transaction structure for each of the ABBA facilities can be split into 2 periods, namely pre-completion (i.e. during construction period) and post-completion (i.e. after completion and handover of the teachers' quarters to the GOM).

Pre-Completion

Proceeds from the ABBA facilities are deposited into an Escrow Account, which has been pledged to the noteholders as security. The Escrow Account is at Public Bank Berhad (rated AAA/P1 by RAM) and is managed by the Trustee, who is also the sole signatory of the account. The Trustee can only withdraw money from the Escrow Account for the payment of: (1) construction progress payments, construction management and guarantee expenses to the relevant contractors; (2) financial expenses to the managers; (3) trustee fees; (4) rating fees; (5) legal fees; (6) redemption of the ABBA facilities; (7) regulatory fees and (8) reporting accountant fees. Withdrawals from the Escrow Account for construction progress payments to the respective contractors can only be made upon certification by the architect/independent consultant, NRY Architects Sdn Bhd.

Post-Completion

Upon the completion and handover of each cluster of the teachers' quarters to the GOM, monthly concession payments via cheques from the GOM shall be paid directly into the respective Escrow Accounts. The Trustee shall also withdraw money from the Escrow Account to redeem the ABBA facilities in accordance with the redemption schedule, or to pay the principal and profit obligations pertaining to the ABBA facilities and to meet other agreed operating expenses. Presently, the GOM issues the monthly payments in a single cheque to ESSB, which will then deposit them into one of the Escrow Accounts. The Trustee will then make the necessary transfers to the respective Escrow Accounts based on ESSB's advice, supported by the respective invoices. Deposits into the Tranche 4 Escrow Account will only commence upon the full repayment of Tranches 1 and 2.

Financial Covenants and Credit Enhancement Mechanisms

Tranche 1: With all units taken over by the GOM, there is stable monthly income to meet scheduled obligations.

Tranche 2: ESSB is also required to maintain a minimum balance of RM15.million in the Escrow account at all times. Contrary to Tranches 1 and 3, the concessionaire is permitted to withdraw any surplus money in excess of the stipulated minimum balance, on a semi-annual basis. However, such withdrawals can only be made after each scheduled ABBA redemption and the payment of all other approved expenses (i.e. trustee fees, rating fees, regulatory fees and legal fees).

Tranche 3: Tranche 3 dictates a minimum balance of RM5.30 million for the Escrow Account. To ensure that monthly GOM payments under Tranche 3 are properly applied to meet the relevant financial obligations, ESSB is not allowed to withdraw any funds from the Tranche 3 Escrow Account. This condition is necessary as the financial obligations pertaining to Tranche 3 are not regular throughout its tenure, resulting in a need for the accumulation of funds to meet the scheduled principal repayments.

Tranche 4: ESSB is also not required to maintain a minimum balance for the Tranche 4 Escrow Account. As comfort to the bondholders, however, ESSB is not permitted to withdraw any surplus funds (after meeting its scheduled redemptions) until Tranche 4 has been fully redeemed.

4.3.5 Telecommunications

Touch Matrix Sdn Bhd

Instrument	RM60 million Murabahah Islamic Medium-Term Notes Programme (2005/2012)
Rating	AA3 [Assigned]
Maturity Date	7 years
Profit Margins	Floating
Lead Arranger	KAF Discounts Berhad
Trustee	KAF Trustee Berhad
Security	1) Assignment of Touch Matrix Sdn Bhd's ("Touch Matrix") rights, titles, interests and benefits under the License Agreement and Authorised Work Orders. 2) First-ranking debenture comprising fixed and floating charges on all the present and future assets of Touch Matrix. 3) Assignment of the Designated Accounts. 4) Assignment of the applicable insurance policies.

Project Background

Touch Matrix is a network facilities provider ("NFP") of telecommunication infrastructure facilities ("towers"), licensed by the Malaysian Communications and Multimedia Commission ("MCMC") under the Communications and Multimedia Act 1998. Touch Matrix is also the appointed state-backed company ("SBC") in Pahang responsible for the rollout of towers for that State under Timeline Two ("T2"), i.e. the MCMC's master plan to extend cellular coverage to 100% of highways, tourist spots, major towns, industrial zones and other places which have a population density of 80 person/sq km.

Pursuant to the Licence Agreement ("LA") signed with Maxis Broadband Sdn Bhd (a wholly owned subsidiary of Maxis Communications Berhad ("Maxis")), Celcom (Malaysia) Berhad ("Celcom") and Digi Telecommunications Sdn Bhd ("DiGi") (collectively known as "the Celcos") on 28 April 2005, Touch Matrix is to construct and license the use of towers to the Celcos, based on a set of predetermined terms and conditions.

Financing Structure

The proceeds from the issuance of Islamic Medium Term Notes (IMTN) under the proposed Programme will be utilised to fund the construction of new towers, to fund the initial amount required under the Finance Service Reserve Account ("FSRA") and to pay costs related to the IMTN Programme.

The conditions precedent for the availability of the proposed Programme include the injection of initial towers into Touch Matrix by its shareholders, once the relevant Authorised Work Orders (AWOs) and Certificate of Acceptance (CoAs) for these towers have been obtained. The cashflow generated by these towers will be sufficient to cover Touch Matrix's fixed operating expenses during the tenure of the proposed Programme. No consideration will be paid by Touch Matrix, as the injection of the initial towers will be reflected as shareholders' advances in its accounts.

As a condition precedent to each issuance of IMTN under the proposed Programme, the AWOs for a set of identified towers must be in force and the amount of IMTN issued will be based on 90% of the discounted expected receivable value ("ERV"). Each issue request must be accompanied by a report on the calculation of revenue, duly reviewed by the reporting accountant. The minimum issuance size under the proposed Programme is RM1 million.

Financial Covenants and Credit Enhancement Mechanisms

Under the financing documents, Touch Matrix is required to open and maintain the following Syariah-compliant Designated Accounts:

1) Disbursement Account - captures the proceeds from each issuance of IMTN under the proposed Programme, after deducting transaction costs and the initial amounts required under the FSRA. The money in this account - managed solely by the Trustee - can only be withdrawn to pay the construction costs of new telecommunication towers. Withdrawals must be supported by invoices from Touch Matrix's contractors for the relevant towers.
2) Revenue Account - serves to capture all the revenues and proceeds due and payable to Touch Matrix. Managed solely by the Trustee, all amounts deposited into this account shall be used in the following pre-determined order of priority:
   a) Payment of taxes and other charges imposed by the Government of Malaysia.
   b) Transfer of required amounts to the FSRA.
   c) Transfer of required amounts to the SFA.
   d) Transfer to the Operating Account, based on the quarterly budget
3) FSRA - Upon each issuance of IMTN, an amount equivalent to the profit payments for the next 6 months will be transferred to the FSRA from the Revenue Account. The money in the FSRA can only be utilised to pay the semi-annual profit payments.
4) Sinking Fund Account (SFA)- The Revenue Account will transfer, on a monthly basis, an amount equivalent to 50% of the revenues received by Touch Matrix into the SFA. The amount accumulated in the SFA can only be utilised towards the redemption of outstanding IMTN.

5) Operating Account - The Operating Account is the only Designated Account managed by Touch Matrix. It captures all the money transferred from the Revenue Account, based on the quarterly budget which will be used to meet the Company's operating expenditure and overhead expenses.

Under the financing documents, prior to the full redemption of the outstanding IMTN, there are covenants that restrict:

1) Any principal repayment or interest payment with respect to any subordinated advances/loan stocks;
2) Any loans or advances to any person or entity (including its shareholders and directors);
3) Any payment of dividends on share capital.

There are also covenants that restrict Touch Matrix from assuming further debt (other than subordinated advances from its shareholders/directors and amounts raised under its hire-purchase arrangements7) and from carrying out any activity other than that in accordance with its Network Facilities Provider license.

4.4 Main Players in Structuring Infrastructure Financing

There are numerous players in the financial marketplace that are involved in the entire process of infrastructure bond issuance and they are the highly developed and integrated investment banking institutions in Malaysia. These institutions are involved from the beginning in terms of origination of debt security through to the distribution through the Treasury arms of their operations.

As show in Table 17, CIMB is the largest player in the market with respect to both the value and number of issues. CIMB's issue value is more than double the value of ASEAM's which is ranked 2nd in the league table. The top 5 issuers by value account for around 74% of total issue value. Islamic debt issuances out-value conventional bond issues, commanding around 70% of the total issues.

Table 17. Lead Managers' League Table by Value of Issues

Rank	Lead Manager	Value (RM Million)
1	**CIMB**	34,418
2	**ASEAM**	15,036
3	**AMINVEST**	14,060
4	**RHB INVESTMENT**	9,100
5	**UOB**	6,082
6	**DEUTCSHE**	4,610
9	**MUAMALAT**	3,649
7	**KAF**	2,340
8	**BIMB**	2,200
12	**MIMB**	2,112
13	**AMANAH**	1,999
10	**RHB**	1,915
15	**CITIBANK**	1,620
11	**BNM**	1,600
14	**RHB ASSETS**	1,165
16	**HSBC**	945
17	**AFFIN**	898
18	**MIDF**	535
19	**STANDARD CHARTERED**	401
20	**SOUTHERN BANK**	350
21	**ALLIANCE**	332
22	**AVENUE**	195
23	**ABN**	80
24	**OCBC**	65
	TOTAL	**105,707**

Source: RAM Ratings Database

Table 18. League Managers League Table by Number of Issues

Rank	Lead Manager	Number
1	**ASEAM**	23
1	**CIMB**	23
3	**AMINVEST**	19
4	**UOB**	12
5	**AMANAH**	8
6	**KAF**	5
6	**MIMB**	5
8	**RHB INVESTMENT**	4
9	**AFFIN**	3
9	**ALLIANCE**	3
9	**CITIBANK**	3
9	**DEUTCSHE**	3
9	**MIDF**	3
9	**RHB ASSETS**	3
15	**HSBC**	2
15	**MUAMALAT**	2
15	**RHB**	2
18	**ABN**	1
18	**AVENUE**	1
18	**BIMB**	1
18	**BNM**	1
18	**OCBC**	1
18	**SOUTHERN BANK**	1
18	**STANDARD CHARTERED**	1
	TOTAL	**130**

Source: RAM Ratings Database

Method of Issuance

Malaysian Government Securities, Malaysian Treasury Bills, Khazanah Bonds (Benchmark Bonds), Cagamas Notes and other Bonds are issued through a tender process where Principal Dealers tender competitively on the basis of price/discount for a minimum of 10% of the issue. These Principal Dealers comprise of Tier 1 banks only which have a capital base of at least RM500 million. The time to market for a corporate bond issue, on average, is 6 months; this period of time runs from the point the mandate is received until the issue date. Any delay puts additional risk on the underwriting bank, due to unforeseen interest rate fluctuations. Nearly all MTNs and Commercial Paper Programs are subscribed by Tender Panel Members.

4.5 Key Issues and Challenges in Financing Infrastructure Projects

As the demand for infrastructure continues to grow in tandem with economic growth, there are certain issues prevailing in infrastructure financing which have limited the amount of investor funds in this segment of financing, ultimately resulting in a mismatch in the supply and demand of funds in the country's financial system.

Changes in Agreements with Concessionaires

The concept of uncertainty in any economic endeavor is of great significance and bears considerable risk. One impediment that affects infrastructure projects is the wavering nature of government regulation or management of their agreements with concessionaires. This can be seen in the case of toll road facilities and also most recently the intended renegotiation of terms pertaining to the Purchasing Power Agreements (PPAs) between Tenaga Nasional (the main off-taker) and the Independent Power Producers (IPPs). PPAs form the stable foundation for IPPs operating in the Energy sector as they are viewed to form the basis of IPPs' demand and they currently offer very favourable terms to the IPPs (with regards to how much capacity they will supply and the rates at which this supply will be taken up at). The uncertainty of the outcome of this renegotiation process (in which reserve margins are expected to be reduced and the postponement in the commissioning of certain plants) has the ability to deter any aggressive investment in this sector.

Macroeconomic Instability

As most vividly exemplified by the 1997/98 Asian financial crisis, infrastructure financing by the private sector is not immune to macroeconomic shocks. Inconsistent fiscal and monetary policies that advocate constant adjustments to key economic variables such as interest rates, exchange rates, and taxes will cause uncertainty in the market and deter investment. This issue is especially accentuated if there is inadequate institutional framework to protect the interests of investors in the market. However, since the financial crisis Malaysia has shown relative macroeconomic stability and private investment is anticipated to pick up further in the coming years.

Project Economics and Viability

Although infrastructure projects are deemed to be relatively stable and robust investments, there still remain inherent risks in ensuring successful project completion and operation and generation of returns to investors. There are several infrastructure projects in the past that have been unsuccessful in doing so. One of the toll road projects that encountered difficulties is the ELITE Toll Road whose operations had to be bailed out by the Government due to debt repayment default. The failure of this project stemmed from the fact that toll receipts fell short of expected revenue and the ramp up period to which repayments started was too short. Thus, not only is it imperative to carefully access the feasibility of the project at hand, but it is also extremely important to look at how the whole financing scheme is structured. Potential investors must be able to assess these factors cautiously.

Under-developed Capital Market

Malaysia's bond market is relatively young, with the first infrastructure-type project bonds being issued in the mid-1990s. Investors' appetite for very long tenured bonds of more than 20 years is still low with the longest tenures presently being in the region of 10-15 years. The secondary market is still relatively illiquid. Although the market has become more diversified (with respect to issuers), the bonds remain concentrated at the high-end of the credit quality spectrum. There is hardly any market demand for infrastructure-related issues that have a rating of below AA due to high risk aversion amongst investors (mainly caused by regulation of institutional investors which form the bulk of investor base) and the absence of a market for lower grade bonds (which could be due to the embryonic stage of the venture capital sector). Another prevalent feature of the market is the prevalent investor type of buying and holding on to their investment until maturity, resulting in an illiquid secondary market.

Insufficient Information Disclosure

As mentioned previously, the main investors in infrastructure bond financing are the institutional investors such as insurance companies. One common gripe amongst these investors is the lack of adequate information that is available for potential investors to make optimal investment decisions. Projected cash flows are the main source of information in which investment basis is conducted; however, a more transparent overview of the project itself would spur investment activity. It would also encourage different types of investors into the market. Furthermore, a large number of project issues still do not fully attempt to cater to the needs of its main investors (institutions) with specific maturity periods and insufficient investor protection.

5. LEGAL AND REGULATORY FRAMEWORK GOVERNING THE BOND MARKET

5.1 Rules and Regulations Governing the Issuance of Bonds

The Malaysian bond market is supervised by two principal regulatory bodies, namely Bank Negara Malaysia (Central Bank of Malaysia) and the Securities Commission (SC).

Bank Negara Malaysia (BNM) regulates the activities of financial institutions via the Banking and Financial Institutions Act of 1989 (BAFIA). It issued the Guidelines on the Issuance of Private Debt Securities in 1989 which established the process, procedures and criteria for any resident company to raise funds from the public. A resident company is free to issue any amount of ringgit PDS. On 1 July 2000, the approving authority for private debt securities (PDS) was transferred from BNM to the SC.

The SC was established on 1 March 1993 pursuant to the Securities Commission Act of 1993 with the power to regulate the issuance of and the dealings in securities, to encourage the development of the securities market, and to curb improper dealings. It also regulates all matters pertaining to unit trusts and takeovers and mergers. Effective 1 July 2000, the SC is the single approving and registering authority for prospectuses with respect to all PDS other than securities issued by unlisted recreational clubs. The lodgment of prospectuses is under the responsibility of the Companies Commission of Malaysia (formerly known as Registrar of Companies).

A chronology of changes in the regulatory framework and bond market development initiative are provided in Appendix I and Appendix II respectively. The SC updated the guidelines for the issuance of PDS on 30th March 2003. These guidelines are reproduced in Appendix III.

Tendering of bonds is carried out through the Fully Automated System for Tendering (FAST). FAST is an automated tendering system whereby invitations to tender, bids submission, and processing of tender for Scripless Securities Trading System (SSTS) instruments and short-term private debt securities are done electronically. The objective of FAST is to improve the overall efficiency of the tendering procedures, to reduce errors and delays arising from manual handling of tenders, and to eliminate potential disputes that may arise from the bidding process. Membership in FAST is currently open to licensed financial institutions (commercial banks, merchant banks, discount houses, and Islamic banks), development banks, insurance companies, statutory bodies, other financial bodies, and other market participants as approved by BNM.

For fund settlement purposes, the results of the tender for SSTS instruments are linked to the Real Time Electronic Transfer of Funds System (RENTAS) for allotment of securities and cash transfer. For PDS tendered through FAST, the settlement is done manually either through the Interbank Funds Transfer System or check clearing. Membership of RENTAS is restricted to financial institutions licensed under the Banking and Financial Institution Act of 1989. The Bond Information and Dissemination System (BIDS), a computerized centralized database on Malaysian debt securities, provides information on the terms of issue, real-time prices, details of trades done, and relevant news on the various debt securities issued by both the Government and the private sector.

The transparency of information provided by BIDS has facilitated both primary and secondary market activities in the domestic bond market. BIDS provides transparency of information on bonds issued, thereby facilitating efficient trading in the secondary OTC market and enhancing liquidity in the debt securities market.

In late 2005, the SC promulgated a set of guidelines for the registration of bond pricing agencies. Subsequently in late 2006, it approved the registration of Bondweb Malaysia Sdn Bhd as the country's first licensed bond pricing agency. The bond pricing agency provides the market with prices of all bonds outstanding in the market on a daily basis. With the availability of daily bond prices based on fair valuation by an independent pricing agency, the expected improvement in price discovery and implementation of mark-to-market valuation practices are expected to contribute to a more efficient and transparent bond market.

5.2 Bond Market Development Plan

The development plan for the Malaysian bond market is spelt out in the Capital Market Masterplan (CMP) released in February 2001. It is a comprehensive plan charting the strategic positioning and future direction of the Malaysian capital market for the next ten years (2001 - 2010). The key strategies formulated for the development of the bond market and our assessment of the implementation status is summarized in Table 19.

Table 19. Capital Market Masterplan 2001-2010 and Current Implementation Status

CMP Strategy	Implementation Status
To remove the mandatory requirement for credit ratings on issuance of corporate bonds.	This has yet to be implemented to give domestic rating agencies more time to prepare for the deregulation as well as to explore partnerships with global credit rating agencies to strengthen their rating services so that the demand for rating services becomes investor-driven rather than regulatory driven. We expect the removal of the mandatory requirement to happen during the plan period up to 2010.
To allow international ratings for domestic bond issuance.	As above, this has yet to be implemented partly because the international rating agencies have or are in the process of taking up an equity stake in the two domestic rating agencies. Effectively, their participation in the domestic operations is equivalent to allowing international ratings for domestic bond issuance.
To allow regulated short selling of MGS and corporate bonds.	On 7^{th} March 2005, the Central Bank issued the Guidelines on Regulated Short-Selling of Securities and established a short-selling framework for MGS in the wholesale market for Principal Dealers, interbank participants and universal brokers.
To establish MGS futures and options market.	3 and 5-year MGS futures are now available and actively traded in the stock exchange (Bursa Malaysia).
To free up "captive demand" on MGS by pension fund and insurance companies.	The EPF is now allowed to reduce its MGS holdings to below the mandatory 50% and direct placement of MGS with the EPF is now discontinued. The issuance of MGS by the government is now based on competitive bidding.
To encourage international financial institutions and multinational corporations to issue ringgit bonds.	There have been two issuances by multilateral development banks and multilateral financial institutions.
To establish a centralised platform for the clearing and settlement of listed and unlisted bonds.	The stock exchange is in the process of implementing a centralised platform for the trading of unlisted bonds. Its launch which was planned for 2006 has been postponed to 2007 due to technical problems.
To encourage participation of retail investors in the corporate bond market.	The SC in now promoting bond funds as a means for retail investors to participate in the bond market. High net worth individuals however are allowed to purchase bonds over-the-country through the Principal Dealers.
To review tax framework to encourage issuance and investment in debt securities.	Stamp duty for issuance of corporate bonds has been waived and individual investors and unit trusts are exempted from paying tax on interest earned from investment in listed and unlisted corporate bonds.

6. INVESTOR PROFILE

6.1 Demand and Risk Profile of Investors

The nature of infrastructure project bonds mainly appeal to institutional investors such as the insurance companies, unit trusts and pension funds due to their long-term investment periods that enable these institutions to generate a stream of long-term cash flows consistent with their objectives.

In the debt market, issues of bonds may be publicly placed i.e. offered to any party participating in the market, or through a process of private placement which involves these bonds being sold directly ('placed') with pre-identified investors which are usually institutional organizations like those mentioned above. As different types of bonds bear varying risk intensities (ranging from relatively risk-free investments like Malaysian Government Securities (MGS) and the more risky unsecured type bonds), there are various forms of debt securities to suit investors with differing risk profiles.

Institutional Investors

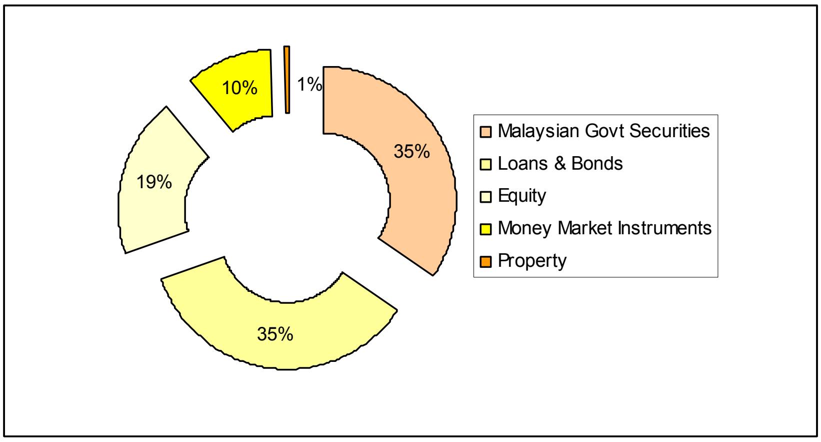
These are professional or institutional investing entities which utilize the bond market as a vehicle to create steady, stable streams of returns to their clients. Such institutions include pension funds like Employees Provident Fund (EPF) and insurance companies (more so nowadays with many insurance schemes having investment-linked elements attached to them).

The main institutional players in the investment market are:-

- *Unit Trusts/Mutual Funds* - Unit Trust Funds are regulated by the guidelines set out by the Securities Commission in which 15% of the value of the Unit Trust's fund is required to be invested into liquid assets.
- *Insurance Companies* - Under the Insurance Act 1963, at least 25% of total life insurance funds must be invested into Malaysian Government Securities (MGS). The stipulated maximum share of the different categories of investment is as follows (as prescribed by regulations): Equity (30%), Loans (20%) and Properties (20%). Subsequently, a maximum of 20% can be invested into secured corporate bonds and a maximum of 10% is allowed for unsecured bonds which have at least an A long-term rating. Different Insurance companies will have their different policies in terms of how much of their funds (with respect to the stated limit) they invest into debt which depends on their level of conservativeness in taking on debt securities. This proportion could range from 10% to 30% in the Malaysian market.

- *Pension and Social Security Funds (EPF)* - Under the EPF Act 1991, it is a requirement for EPF to invest at least 50% of its funds into MGS. However, this rule has been under much criticism as there are not enough MGS available for EPF to satisfy this minimum requirement. In recent years, the EPF's holdings of MGS have fallen below its required threshold due to a reduction in the strictness of this condition and the improvement in the Malaysian budget situation. Currently (as at 31st December 2006) MGS accounts for 34.6% of asset allocation. This ruling has been viewed as the main deterrent for EPF in investing in other forms of financing. However, with respect to the high uptake rate of MGS (which are primarily used to development expenditure by the Government), EPF can be regarded as the main institution that invests in infrastructure financing through debt in the economy.

Figure 10. Asset Allocation of EPF as at 31st December, 2006[4]



Source: Employees Provident Fund

Table 20. Investment Assets of the Employees Provident Fund

Type of Investment	Amount (RM billion)
Malaysian Government Securities	98.67
Loans & Bonds	100.7
Equity	54.72
Money Market Instruments	29.66
Property	1.7
Total	285.45

Source: Employees Provident Fund

- EPF's investments are diversified across the infrastructure sub- sectors. Its portfolio is currently skewed towards IPP bonds due to the high number of debt issues in this sector. The debt securities in its portfolio have an average credit rating of double A

4 "Loans And Bonds" consists of Private Debt Securities, Guaranteed Loans & Debentures, Cagamas Securities, Loan Stock, Islamic Bonds, Malaysian Government Islamic Bonds, Short-term Conventional Bonds, Conventional & Islamic Supra Bonds, Fixed Income Fund Managers after Allowance for Bad and Doubtful Debts

(AA). Besides a minimum rating of a single A, EPF considers the yield on investment as the main investment criterion. According to a senior official interviewed, EPF does not have any preference regarding the type or structure of the debt instrument but its internal credit evaluation process is focused on the security features and enhancement present in the bond structure.

6.2 Requirements of Investors in the Bond Market

Institutional investors find investment in the infrastructure sector to be of great importance and relevant to their relative investment requirements due to the nature of infrastructure activities. It is important to understand these requirements in order to fully access the reasons for participation.

One dominant feature of the profile of investors in the Malaysian bond market is their risk adverse attitude towards investment. This is exhibited by the fact that investors are very reluctant to invest in bonds that have long-term ratings below an A. Thus high grade bonds with extremely robust credit quality are of great significance in terms of investor requirements.

The poor risk appetite of institutional investors can be attributed to the investment guidelines that specify the minimum investment grade for bonds. This minimum investment grade has not changed much since the establishment of the bond market due in part to the experience of several bond defaults during the 1997/98 Asian financial crisis that further increase the risk aversion and affirm the conservative approach of institutional investors towards the debt market. Moreover, institutional investors must also adhere to guidelines set out in accounting policies and risk management standards like the Basel Accord, which may also establish certain limitations on their investment risk.

High ratings of bonds are associated with certain favorable characteristics of the project, which in turn reflect the investor requirements when choosing an appropriate investment. Thus, investors would require projects to have the following desirable attributes amongst others:-

- Strong projected cash flows
- Stability and good track record of sponsor
- Stability in the overall sector and in the underlying policies governing it
- Well-structured financing structure for project, with risk mitigation through credit enhancement mechanisms

The availability of information and the transparency of the operations of the project rank very high on the list of investor requirements. It is imperative that investors feel that the whole investment evaluation process is sufficiently transparent so as to lessen the effects of uncertainty, which would subsequently dampen investment activity. Thus, the role of ratings agencies has become increasingly important in providing third party, objective credit assessment, particularly for bonds which have more complicated features.

Another characteristic of an investor requirement is for the debt security to have a long tenure to maturity. Given that the investing institutions have long-term liabilities, they require investment in long term assets to enable maturity matching. Also, given that the secondary market is not sufficiently liquid, these institutions are generally 'buy and hold' investors or passive rather active investors that engage in trading to profit from changes in interest rate, yield curve or credit quality.

The institutional investors require relatively stable streams of cash flow in order to service their respective clients' returns to investment. Infrastructure bonds are seen to be one of the more stable sectors in the economy in this regard, mainly due to the fact that many of these projects tend to be state initiatives or concessions. This sort of Government backing is viewed as a highly desirable attribute that can act as a safeguard for the investment.

6.3 Credit Rating and Market Performance of Selected Infrastructure Bonds

The rating and market performance of the infrastructure bonds over time varies by sector, reflecting the underlying performance of the project/company, the stability of cash flow generation and the mitigation of business and financial risks. An overview of the credit and market performance of the representative bond selected for each sub-sector is presented below.

Credit Rating Performance

1. Power

Selected Case 1:

Corporation Name: YTL Power Generation Sdn Bhd

Debt Instrument: Fixed Rate Facility

Issue Value: RM 1,500 million

Rating History:

Year	Rating
1993	AA3
1995	AA2
1996	AA1
1997	AA1
1998	AA1
1999	AA1
2001	AA1
2002	AA1
2003	AA1
2004	AA1
2005	AA1
2006	AA1

When the bonds were first issued in 1993, they were rated at AA3 rating by RAM. Over time, however, given its stable performance record and the favourable terms in its PPA, its rating was upgraded to AA1 in 1996 and reaffirmed annually since then.

Selected Case 2:

Corporation Name: Powertek Bhd

Debt Instrument: Redeemable Unsecured Bonds

Issue Value: RM 350 million

Rating History:

Year	Rating
2001	AA1
2003	AA1
2004	AA1
2005	AA1
2006	AA1

Again, another First Generation IPP maintains its initial rating of AA1 over the same period as the case above. It reflects the stable credit quality of IPPs due to the inherent structure of the project whereby the off-take is secured.

2. Transport

Selected Case 1:

Corporation Name: Expressway Lingkaran Tengah Sdn Bhd (ELITE)

Debt Instrument: Floating Rate Notes

Issue Value: RM 440 million

Rating History:

Year	Rating
1995	A2
1996	A2
1998	A2
1999	C3

This particular issue in the transport sector experienced many financial difficulties during its course, mainly attributable to the structure of the financing scheme and the onset of the Asian financial crisis in 1997/98. A month after the rating of “C3” in 1999, the issue was further downgraded to a “D”.

Selected Case 2:

Corporation Name: Expressway Lingkaran Tengah Sdn Bhd (ELITE)

Debt Instrument: Al-Bai’ Bithaman Ajil Islamic Debt Securities

Issue Value: RM 800 million

Rating History:

Year	Rating
2003	AA3
2004	AA3
2005	AA3
2006	AA2

After a debt restructuring exercise for the ELITE project, a new issue has been put into the market in the form of Islamic Debt instruments. This issue has a “profit margin” band, limiting interest rate fluctuation, which may account for its greater stability to some extent.

3. Water and Sewerage

Corporation Name: Syarikat Pengeluar Air Sungai Selangor Sdn Bhd (SPLASH)

Debt Instrument: Al-Bai’ Bithaman Ajil Islamic Debt Securities

Issue Value: RM 1,407 million

Rating History:

Year	Rating
2000	AA3
2002	AA3
2003	AA3
2004	A1
2005	AA3
2006	AA3

SPLASH’s unfavourable credit position improved in 2004 following the restructuring of the Selangor state water industry, whereby both payment and collection cycles were reduced significantly.

4. Airports and Ports

Selected Case 1:

Corporation Name: K.L International Airport Bhd

Debt Instrument: Bai' Bithaman Ajil Notes Issuance Facility

Issue Value: RM 4,060 million

Rating History:

Year	Rating
2003	AAA
2004	AAA
2006	AAA

The strong government backing for this project enabled the bonds to obtain the highest rating that was maintained ever since.

Selected Case 2:

Corporation Name: Penang Port Sdn Bhd

Debt Instrument: Medium-Term Notes Facility

Issue Value: RM 80 million

Rating History:

Year	Rating
2000	A2
2001	A2
2002	A2
2003	A2
2004	A2

Ratings have remained stable throughout the issue.

5. Telecommunications

Selected Case 1:

Corporation Name: Celcom (Malaysia) Bhd

Debt Instrument: Floating Rate Bonds

Issue Value: RM 350 million

Rating History:

Year	Rating
1995	A1
1996	A1
1997	A1
1998	A1
1999	BBB3

Corporate Telco issues are highly dependent upon the status of its operations and revenue-generating performance. This can be illustrated by the fixed rate issue shown below, as opposed to the floating rate in this case, for the same corporation, over the same period.

Selected Case 2:

Corporation Name: Celcom (Malaysia) Bhd

Debt Instrument: Fixed Rate Bonds

Issue Value: RM 182.8 million

Rating History:

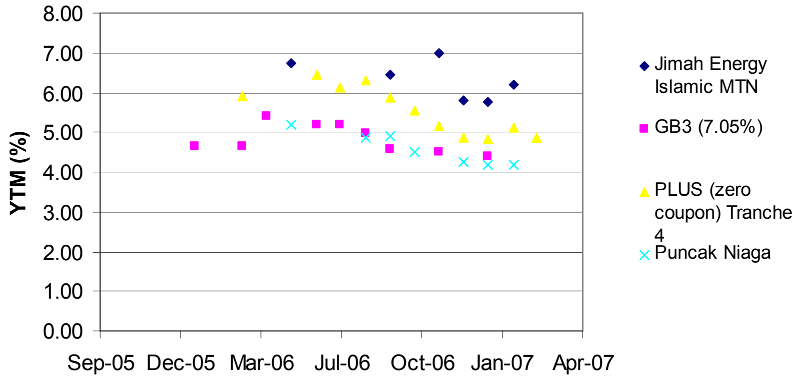
Year	Rating
1995	A1
1996	A1
1997	A1
1998	A1
1999	BBB3

Rating performance was not enhanced by the fixed feature of the finance structure.

Market Performance

The price or yield of infrastructure bonds in the secondary market is driven by changes in market (principally interest rate), credit and liquidity risks. A snapshot of the yield performance of selected infrastructure bonds is shown in Figure 11 to illustrate the fluctuations in the market performance of individual bonds. The individual differences can be attributed to sector, credit rating, maturity period and investors' perception of the security of individual bonds.

Figure 11. Market Performance of Selected Infrastructure Bonds



Source: Bondweb Malaysia

The above selection is intended to illustrate the sophistication of investors in pricing the different risk elements of each bond given the different characteristics of the bonds:

- Power sector: Jimah - rated AA3(s) by RAM, period to maturity 18 years
- Power sector: GB3 - rated AA2(s) by RAM, period to maturity 7 years
- Toll road sector: PLUS (zero coupon) - rated AAA by RAM, period to maturity 24 years
- Water sector: Puncak Niaga - rated A+ by MARC, period to maturity 9 years

Secondary market liquidity however remains thin as shown by the turnover ratio in Table 21.

Table 21. Monthly Trading Volume and Turnover Ratio

Year	JIMAH		GB3		PLUS		PUNCAK	
	Vol traded (RM mil)	Monthly turnover (%)	Vol traded (RM mil)	Monthly turnover (%)	Vol traded (RM mil)	Monthly turnover (%)	Vol traded (RM mil)	Monthly turnover (%)
2002	-	-	134	9%	-	-	276	13%
2003	-	-	124	9%	-	-	265	12%
2004	-	-	4	0%	-	-	115	5%
2005	208	12%	4	0%	469	5%	80	4%
2006	155	9%	22	2%	485	5%	148	7%
Total outstanding (RM mil)	150		120		800		180	

Source: Bondweb Malaysia

7. CREDIT RISK ASSESSMENT METHODOLOGY FOR EVALUATING INFRASTRUCTURE PROJECTS

7.1 Checklist for Assessing Credit Quality of Infrastructure Projects

Given the increasingly diverse needs of project sponsors and lenders in the Infrastructure financing segment and the dynamic environment that these projects operate in, assessing the credit quality of such projects has become a more complicated and significant process. A concise methodological framework for this purpose is identified below and explained in this section.

This methodology is seen to successfully quantify and qualify apparent risks in this financing segment for potential investors in the market. The analysis consists of factors that are directly related to the implementation of the project, such as cash flows from project, and factors external to the project that may have implications on its relative viability, such as institutional development supporting the project as illustrated in Figure 12, are also considered.

Figure 12. Assessing Credit Quality of Infrastructure Projects - Key Risk Areas

Step 1 - Project-Level Risks

Project-Level Risks are the most fundamental risks that must be taken into account when assessing credit quality. In this analysis, primarily, the ability of the project to operate as a going-concern for the duration of revenue-generating period in order to service its debt obligations is considered.

Project characteristics used to assess this include:-

Contractual Foundation - To determine the level of security of the project in the market through the agreements provided in the contracts. One feature of a good contract in this sense, is one which manages to align the objectives of both the lenders and those carrying out the project.

Technology, Construction & Operations - The ability of the project to be completed and in the way it was first planned to be in terms of design, construction method. This consists of pre-construction and post-construction risks. This pinpoints the reputation of the contractors on the project being an important element in assessing credit quality as the completion of the project is largely dependent on this party.

Competitive Market Exposure - Analysis of the potential relative market position of the project when it becomes an active player in the economy will also provide useful insight into credit quality. Any competitive edge that the entity may have in terms of technology, cost savings etc will feature in this examination.

Legal Structure - To determine whether the project will be solely operating in the activities as stipulated in its contract. Also, the purpose and involvement of other entities connected to the project, such as "Special Purpose Vehicles" (SPVs) and other sponsors will be further investigated and ensuring that insolvent related parties do not affect cash flows of the project.

Counter-Party Exposure - Analysis of contractual participation by external parties having an implication on the project structure eg. Upstream and downstream players in the Industry. The importance of these parties can be illustrated by the example of the strength of offtake counterparts involved in a project. The viability of this player will have a direct consequence on the success of the project.

Financial Strength - The ability of the project to endure the numerous financial obligations (eg. costs of operations and management, expenses etc) and other financial uncertainties (eg. interest rate risks, exchange rate risks etc), is assessed. A key rating criterion is the debt service coverage ratio (DSCR) which measures the ability of the cash flow generated to cover the debt servicing. Table 22 illustrates the highest scoring criteria for project risks.

Table 22. Highest-Scoring Criteria for Projects in terms of Project-Level Risks

Contractual Foundation	Project is a credit lease
	Offshore trustee
	Strict controls on cash flows
Tech/Construction/Operations	Project is a credit lease
	Fixed price and date turnkey project
Competitive Market Exposure	Project is a credit lease
	Project sells a product with worldwide demand
	Strong long-term market outlook
Legal Structure	No ability to issue further debt
	Project is credit lease
Counter-Party Exposure	Rated off-take company with excellent track record
	Counter party guarantees revenue payments
Financial Strength	Amortizing debt payments
	No subordinated debt allowed

Step 2 - Sovereign Risk

This element of the analytical framework employs the use of the Sovereign Foreign Currency Rating of the country in which the project is implemented. Sovereign risk acts as a control, acting as a measure to how willing and able a country's Government can service foreign currency debt in a timely manner and meeting the full obligation; which in turn affects the project ability to service its own specific foreign currency debt. Policies or actions by Governments of the sovereign country will have a bearing on the relative ease or difficulty in accessing financing. A good example is the case of the implementation of exchange controls. However, if in this instance, the project has considerable foreign ownership which is imperative to its operations, the implications of exchange controls would be somewhat mitigated and credit quality would improve.

Step 3 - Institutional Risk

There are certain legal and financial institutions operating in a country that will have a direct effect on the success in implementation of a project, not previously captured in the sovereign risk profile. Thus, the analysis of country-specific factors here aims to complete the whole picture. To illustrate the presence of such risks, a good example would be the way in which a country's legal system deals with Intellectual Property Rights.

The highest scoring criteria in credit quality in terms of institutional risks include:-

- The presence of well-developed legal and financial systems
- A good track record of transparency in financial reporting

Step 4 - Force Majeure Risk

This type of risk may be one of the most significant to account for and as its name implies, it is a risk that is unanticipated and in essence, outside one's control. Futhermore, project financing is one segment which is highly susceptible to this kind of risk. Adequate steps in reducing such risk must be taken as in the event of any force majeure occurrence, there would be a sudden disruption in cash flows which would be dire for project operations. More importantly, the inability to account for these impending occurrences would most probably lead to default on financing obligations. The ability of projects to mitigate the effects of any force majeure occurrence and the ability to return to normal operations following that will improve credit quality of the project.

The highest scoring criteria in credit quality in terms of institutional risks include:-

- High linearity and simplicity in operations such as in Toll Roads
- The characteristic of being geographically spread such as power plants

Step 5 - Credit Enhancements

This involves an assessment of the various credit enhancement facilities available to mitigate most of the risks mentioned in Steps 1-4 in the analytical framework related to the financing structure of the project. These credit enhancement mechanisms are commonly seen in the form of insurance programs that cover both commercial and political risk (usually offered by Multilateral Agencies), insurance products offered by private parties that help reduce the probability of default and other financial elements in the projects financing structure (such as a Debt-Service Reserve Fund) which does not reduce the risk of default per se, but assists the project in recovering post-default.

7.2 Key Risk Areas by Type of Project

Highlighted below are the key risk areas for each infrastructure sub-sector.

Power Sector - Independent Power Producers (IPPs)

Construction Risk

In terms of credit quality, the construction phase holds the single, largest risk for this kind of project. The failure to complete the construction of the revenue-generating entity (plant) will cause the Purchasing Power Agreement (PPA) to become void if the plant fails to be commissioned 180 days after the stipulated finish date on the PPA, leading to the project's cancellation. Thus, thorough understanding of the plant's design and technical aspects must be emphasised.

Contractual Risk

Much importance is also given to the numerous contracts that govern the project. The most prominent one in this sector in Malaysia is the PPA. This contract and the rates attached to it help mitigate risks in power plant projects.

Operation Risk

The availability of capacity of the plant to produce electricity to generate revenue is another area to consider as there is a minimum requirement under the PPA in order for plants to obtain full capacity payments from the Off-takers. Efficiency as measured by heat control is another condition to be satisfied under PPA. Thus operational efficiency of a plant is imperative.

Customer-Concentration Risk

This refers to the ability of the plant project being able to service debt as a function of credit-worthiness of off-taker, in terms of paying its own bills. As electricity generated by IPPs are of derived demand, the relative strength of the source in demand is of utmost importance too.

Transport Sector - Toll Roads

Construction Risk

Completion of the project and thus its establishment as a revenue-generating entity remains of utmost importance. The more complicated building structures that require a large amount of technical expertise and technological know-how in terms of construction processes will be the projects having a higher risk attached to them. Another issue pertaining to construction includes the ease of acquiring land for this use. Delays could lead to additional costs that were not initially budgeted.

Traffic Volume Risk

In terms of Toll Road projects, this element is the most critical risk factor. Through past experiences in the Malaysian market, it has been difficult to accurately forecast the amount of traffic flow through these new toll roads. It has been seen to be extremely volatile in the early months after completion. Thus, projections nowadays are very conservative due to this inherent uncertainty.

Regulatory Risk

Toll Roads in Malaysia are regulated under Concession Agreements (CAs) which are able to dictate the time period and quantum of toll road rate hikes. Due to this regulatory pressure and the unfavourable effects these hikes have on consumers, CAs have been revised to lengthen the time in which a hike can be implemented and the absolute value in these hikes. Thus, risks to debt servicing ability may be brought upon by policies of the regulatory body.

Operations & Maintenance Risk

This risk analyses the operating and maintenance activities of the toll road which are routine for its type of business. In general, it is recognised that most contingencies are handled by insurance and capital expenditure on activities such as road repair will be factored into the annual budgets. Thus, credit risk is assessed in terms of how conservative these O&M expenses have been budgeted and if they are maintained.

Financial Risk

On the whole, toll road operations tend to be relatively stable sources of revenue flow i.e. cash-based operation, not heavily capital-intensive etc. Moreover, margins are seen to be at least 70%, owing to the conservative O&M expenses. However, there is risk in cases where the revenue flow is lower than projected or upper management has pursued a highly aggressive financing structure.

7.3 Specific Credit Support and Covenants used to Increase Investor Participation and Deepening of Bond Market

As described in Section 4 of the report regarding the financing structures of the various landmark deals in Malaysia, there are certain financial covenants and credit enhancement features that serve to protect bondholders' interests. Below is a summary of the most common features in terms of bondholder security for the various infrastructure sectors covered in this study.

Power Sector

1) The Power Purchase Agreement (PPA) (with Tenaga Nasional Bhd (TNB) as the main off-taker) has always been regarded as a credit enhancement feature for IPP bond issuances. The financial and operational strength of TNB, along with the positive terms stipulated for IPPs in the PPAs (especially in the earlier Generations of PPAs) is seen to give potential investors the impetus to invest in this sector.

2) A Debt Service Coverage Ratio (DSCR) is set to be adhered to, with an average minimum ratio being around 1.3 times before distribution of dividends and other obligations to shareholders.

3) Designated Accounts are also maintained in order to separate funds and their uses in order for better monitoring and control of fund inflow/outflow. Such accounts include the "Financial Service Reserve Account" which is usually utilised for the payment of senior Medium Term Notes, "Escrow Account" and other project-based accounts.

4) There are also limits set on the minimum amount that should be retained in the designated accounts at all times and also specifications on the D/E ratio that should be maintained according to the relative financing structures and nature of instruments used in the deal. There is a growing movement toward hybrid securities, i.e. convertible securities or equity which have debt-like characteristics

causing D/E ratios to increase in the direction of more debt in recent structures (like in the Jimah Energy case).

Transport

1) The use of "Financial Waterfalls" provides a prudent method for prioritising payments during implementation of a project and basically serves the same purpose as Designated Accounts. This way, financial discipline is imposed on project funds and there is a clear order to which payments rank higher in importance and so on.

2) There are minimum requirements applied to Debt Service Coverage Ratios (DSCRs) which tend to be higher than that required for IPPs, with minimum values ranging around 2.5-2.75 times. Furthermore, minimum amounts are also applied to the various accounts that must be maintained like the Finance Service Reserve Account and the Maintenance Reserve Account.

3) As discovered through experience (especially the initial failure of financing the ELITE highway), there have been numerous re-financing schemes employed to help in this sort of situation. The ramp up periods to from which the project starts and debt servicing is required to take place, have been extended given the difficulty of making highly accurate projections on traffic flow and thus estimated revenue. Also, the use of zero-coupon bonds are popular in these situations as they facilitate the reduction in cases of credit default.

Moreover, with Government assistance given to several toll road projects (like ELITE) after the Asian Financial Crisis, Government loans were structured as to defer these debt repayments until other debt servicing commitments were back on track.

Water

1) The Capacity Charges (CCs) to water concessionaires have been considered rather lenient in terms of the conditions imposed. As opposed to the situation of IPPs under their PPAs, CCs are disbursed to Water concessionaires regardless of the quantity of water supplied. This is seen to help insulate against fluctuations in demand. Furthermore, CCs are normally structured to cover debt servicing, overheads and other operating expenditure, as well as providing a reasonable rate of return to shareholders. Also, there are no clearly stated operational requirements that must be met in order for water concessionaires to receive full CCs.

2) As with the other 2 sectors described above, projects under the water sector are also subject to financial covenants that relate to minimum DSCR requirements and restrictions on the amount of debt taken on by the company. The minimum average annual DSCR is around 1.3 times.

Besides the features above that are very specific to the respective sectors, other factors that have contributed to the deepening of the bond market include:-

a) Establishment of ratings agencies, contributing to the transparency of the bond investor market.
b) The continuing Government support and commitment to infrastructure development (as seen though the budgeted expenditure of the latest Ninth Malaysia Plan)
c) Ensuring that the parties involved in construction process (eg. Contractors) are players with good track records and fully capable of the job at hand.

8. INFRASTRUCTRURE PROJECTS UNDER THE NINTH MALAYSIA PLAN

8.1 Potential 9MP Projects that Could be Financed through Private Financing Initiatives (PFIs)

The Eighth Malaysia Plan (8MP) saw the expansion of the transportation, water supply and sewerage networks with total government expenditure for the 5-year period from 2001 to 2005 reaching RM38.7 billion on public utilities infrastructure alone. As shown in Table 23, the Ninth Malaysia Plan (9MP) for the 2006-2010 period will continue this expansion on the development of infrastructure with a concerted effort on increasing the efficiency of existing facilities and improving the accessibility and linkages in rural areas.

Table 23. Federal Government Development Allocation and Expenditure

	Eight Malaysia Plan (2001-2005)		Ninth Malaysia Plan (2006-2010)				
Economic Sector	**Expenditure (RM million)**	**% of Total**	**Development Allocation (RM million)**	**% of Total**	**Private Finance Initiatives (RM million)**	**Grand Total**	**% of Grand Total**
Transport	31,813	18.7	31,876	15.9	634	32,510	14.8
Communications	560	0.3	533	0.3	0	533	0.2
Energy & Public Utilities	12,722	7.5	21,805	10.9	0	21,805	9.9
Education & Training	43,729	25.7	41,114	20.6	9,472	50,586	23.0
Housing	6,972	4.1	9,947	5.0	1,565	11,512	5.2
TOTAL	**170,000**	**100.0**	**200,000**	**100.0**	**20,000**	**220,000**	**100.0**

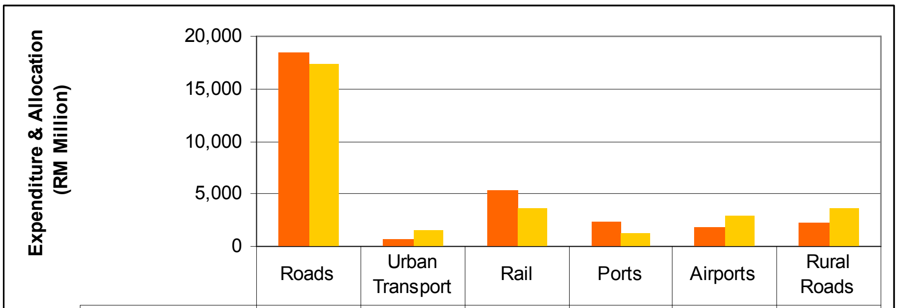
Source: Economic Planning Unit, Malaysia

Compared to the 8MP, there is a considerable increase in the 9MP in total spending on the Energy and Public Utilities & Housing segments, with a notable moderate increase in Education and Training spending too. Amongst these sectors, only the Transport, Education (having the largest scope of PFI activity) and Housing sectors possess the opportunities for Private Financing Initiatives (PFIs) as budgeted by the Government. This could mainly be due to the Government feeling the need of keeping these integral sectors under their control in the era of the requirement for the establishment of new infrastructure for the changing market environment; i.e. new infrastructure for 3G networks and infrastructure for alternative energy facilities. Furthermore, given the significance of the proper setting up of this infrastructure in its initial stages of development, Development Finance Institutions are also expected to be involved in their growth.

Transport

The budgetary allocation for transport infrastructure is summarized in Figure 14. It is seen that the 9MP allocation for roads is lower than the preceding period. There is however greater emphasis on the infrastructure development of rural roads. This is in line with the Government's initiative to increase the accessibility to rural areas in order to narrow the urban-rural divide and to build up areas that have tourism potential. Furthermore, road construction projects will also serve to increase industrial efficiency of logistics of various industries such as the agricultural industry. As a result, the majority of these projects are concerned with the improvement of the physical aspects of roads.

Figure 13. Development Expenditure and Allocation for Transport Sector, 2001-2010 (RM million)



	Roads	Urban Transport	Rail	Ports	Airports	Rural Roads
8MP Expenditure	18,451.40	706.6	5,270.10	2,443.00	1,779.30	2,286.10
9MP Allocation	17,303.10	1,565.50	3,634.90	1,290.00	2,868.50	3,642.40

Source: Economic Planning Unit

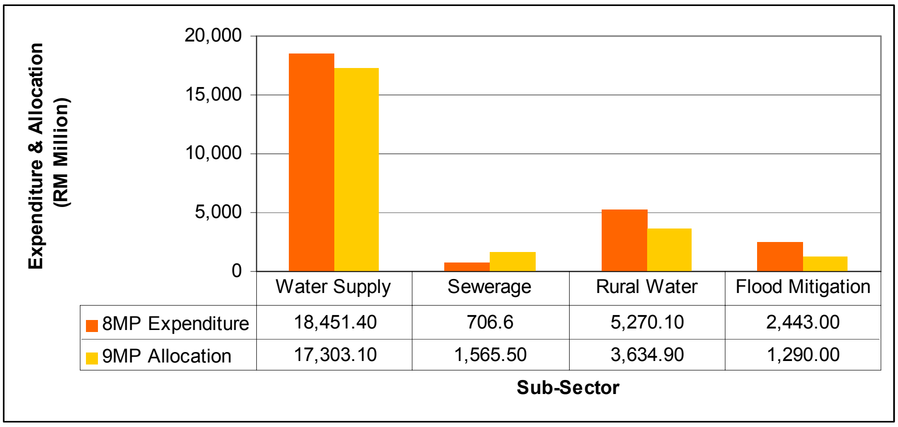
There are also new bridges and roads that are being proposed for construction such as the Bridge over Sungai Terengganu to Pulau Sekati and the construction of ring roads and bypasses in Georgetown (Penang), Seremban and Johor Bahru. Additionally, the rise in urban transport expenditure will be utilized to upgrade and expand the Light Rail Transit (LRT) and Komuter services in Kuala Lumpur and Penang where a monorail system is now being implemented.

Rail and Port expenditure has been increased in the 9MP period and this can be attributed to the bulk of the expenditure being utilized for improvements on existing infrastructure. Airport expenditure is expected to increase due to the need to expand on existing airport capacity and facilities in order to manage the anticipated increase in the volume of tourists visiting the country and the flow of travelers through the airport due to the increased flight frequency and roster of destinations that domestic airlines are flying to.

Water and Sewerage

There is moderation in expenditure across the sub-sectors of water supply, rural water and flood mitigation and lower allocation of funds to the sewerage sub-sector (Figure 15). The numerous projects under the drainage designation may be a main factor attributable to the rise in expenditure; one of which is engaged in the restoration of a town's drainage infrastructure. The most significant project under this sector (which is involved in the supply of water) would be the Inter-State Raw Water Transfer Project which is a water supply initiative running from Pahang to Selangor, scheduled to start construction during the 9MP period.

Figure 14. Development Expenditure and Allocation for Water Sector, 2001-2010 (RM Million)



A major development in this sector with respect to infrastructure projects is that the Water Asset Management Company (WAMCo) will be established to develop future infrastructure programs pertaining to water supply.

Energy

For the period of the 9MP, the Government's allocated expenditure on this sector is around RM1.8 billion with the corresponding amount of expenditure by the NFPEs totaling a massive RM 71.7 billion. As shown in Table 24, it is clear that actual Government expenditure is very low in this sector with the bulk of the activities carried out by NFPEs in this sector. This is indicative of the success of the privatization programme.

Table 24. Development Expenditure and Allocation for Energy Sector, 2001-2010 (RM million)

	8MP Expenditure			**9MP Allocation**		
	Federal Government	NFPEs	Total	Federal Government	NFPEs	Total
Electricity						
Generation	664	12,139.0	12,802.7	0	9,506.6	9,506.6
Transmission	632.5	5,121.4	5,753.9	302.6	6,781.9	7,084.5
Distribution	357	8,313.9	8,670.9	334	11,666.6	12,000.6
Rural Electrification	560.2	0.0	560.2	1,025.30	0.0	1,025.3
Others	173.2	0.0	173.2	166.9	0.0	166.9
Oil & Gas						
Upstream	0	16,700	16,700.0	0	13,100.0	13,100.0
Downstream	0	31,600	31,600.0	0	30,700.0	30,700.0

Source: Economic Planning Unit

However, one trend that stands out is that the government is not involved in the Oil and Gas sector directly and the NFPEs are not involved in more development-skewed activities such as providing rural electrification.

During the 9MP period, the Natural Gas Distribution System (NGDS) is proposed to be expanded by about 640 km, a project which is valued at around RM640 million. Petronas (a prominent NFPE in the Oil and Gas sector) is anticipated to spend RM30.7 billion on upgrading the oil and gas supply infrastructure, increasing the number of service stations and expanding downstream processing in petrochemical industry.

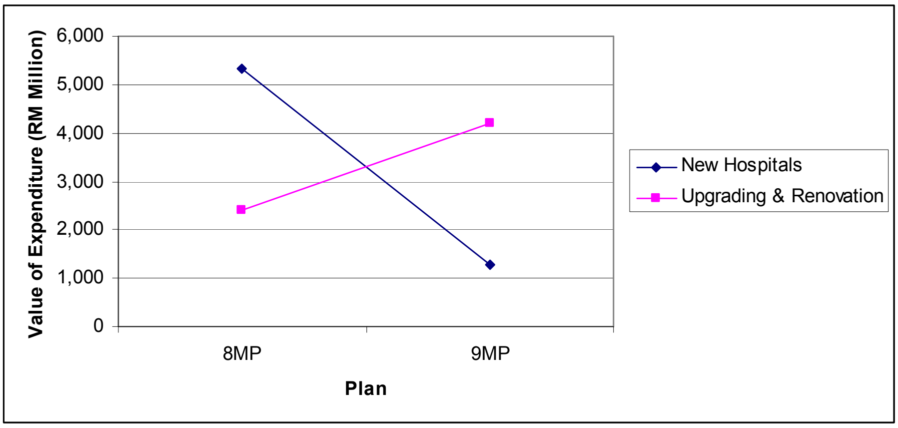
Due to the Government's objective to reduce the reserve margin (excess capacity) to 20% during this period, implementation of projects approved prior to 9MP will be deferred to the next period. Future power generation projects will go through a bidding process where a more efficient procedure to match plant specifications with market needs will be established.

One exciting area that the Government is hoping to enlarge and develop is the market for renewable fuels and alternative energy sources. Given the numerous incentive schemes (e.g. Accelerated Capital Allowance) available for assisting in the development of this segment, it would be a viable area to consider investment in, as it is a new sector which would have substantial infrastructure outlay.

Schools and Hospitals

The majority of projects under the 9MP which have been offered for tender by private participants are related to the construction of schools and colleges. Notably, there is a whole group of polytechnic institutions that have been offered out for tender (around 19 in total), distributed across the whole country. These projects are aimed at upgrading the country's human capital.

Figure 15. Development Expenditure and Allocation for Health Services, 2001-2010 (RM million)



As shown in Figure 17, there is a striking trend that has emerged from one Development Plan to another. In particular, there is no plan to increase the quantity of hospitals, but capacity is to be increased via expansion of existing facilities. Most of the projects that are available under concession arrangements are those that are additions to an existing hospital or medical center (e.g. maternity ward).

Traditionally, infrastructure projects are seen to be more prudent investments than other forms of investment available in the market, thus this characteristic does make them ideal for bond financing. The classic example of an infrastructure project that suits this form of debt financing is the Independent Power Producers (IPPs). Both green field projects and expansion of existing facilities in this area are seen as highly stable investments, primarily due to the favourable terms stipulated in the Purchasing Power Agreements (PPAs) with Tenaga Nasional Berhad and other power distributors in the country. However, IPP construction activity is not seen to be highly active in the 9MP period due to the over-capacity the market it experiencing currently. Only IPP commissioning is taking place and many approved projects are being deferred to a later start date.

There are several high value and high impact projects that have either been identified in the 9MP or proposed by private proponents to secure government support. These projects are described in Table 25.

Table 25. High Impact Projects Identified in the 9MP or Proposed by the Private Sector

Project	Description	Indicative Project Value (RM billion)
1. Trans Malay oil pipeline project	This proposal was first mooted by Ken Koyama and Yasunari Kawasaki and mentioned in a study by Koyama (1999). It involves building an oil pipeline to transfer 2-5 million barrels per day of crude oil across the northern part of Peninsular Malaysia, thus bypassing and easing congestion in the Straits of Malacca. Three private proposals are being considered by the government with one of them proposing to stockpile oil reserves in line with the recent call to enhance energy security for the oil-dependent countries that include China, Japan, Korea, Philippines and Taiwan.	RM5-15 billion
2. High speed rail link between Kuala Lumpur and Johor Baru/ Singapore	A high speed rail system to link Kuala Lumpur and Johor Bharu/Singapore, proposed by YTL Corporation Berhad, one of the promoters for the Express Rail Link (ERL) that connects KL Sentral to the Kuala Lumpur International Airport (KLIA). The proposal is being studied by Khazanah Berhad as directed by the government	RM8-12 billion
3. South Johor Economic Region (SJER)	To be positioned as an international development zone covering an area three times the size of Singapore, it aims to attract high end foreign investors and develop strategic public-private partnerships to catalyze commercial development involving: ▪ Waterfront development ▪ International mixed commercial and residential development ▪ Leisure and destination tourism development ▪ International manufacturing and logistics development ▪ Education-based development and ▪ Healthcare-based development Targeted infrastructure development under Private Financing Initiatives (PFIs), privatization or government funding will be identified.	RM4.278 billion allocated under the 9MP
4. Second Penang Bridge	This 24 km second bridge will help ease congestion in the first bridge that links the island of Penang to the Mainland. When completed in 2011, it will be longest bridge in Malaysia and Southeast Asia.	RM3 billion
5. Monorail systems in Penang, Johor Bharu and Putrajaya and expansion of LRT system in Klang Valley	Monorail systems are being planned for Penang, Johor Bharu (likely to be under the SJER development plan) and the administrative township of Putrajaya	RM2 – RM3 billion each

8.2 The Viability of these Projects Securing Bond Financing

Long-Term Financing Requirements

Financing through the issuance of bonds is well suited for large scale, long term projects that have well-defined cash flow streams that can be utilized to service debt repayments. Bond financing is also used in instance where other forms of borrowing seem too risky for the lender to bear, for example, bank loans. Since the bank loans are funded by short-term deposits, banking financial institutions are generally reluctant to finance projects longer than 5 or 7 years. Furthermore, bond-financed projects tend to be large-scale undertakings. This is a characteristic of many projects in the infrastructure and utilities sector.

Backed by the Stability of the State as Off-taker and Sponsor

The nature and extent of government involvement is usually assessed to determine the extent of risk and the likelihood that it will be absorbed or passed to the government in the event of project failure. The awarding of projects through a transparent tender system is one of the means of ensuring efficiency gains in the construction process and the selection of the best possible candidate for the job, thus alleviating some construction risk. If the project is in the form of a concession, the off-taker (i.e. the Government) will be deemed to be of a credible stature, thereby further improving its status as a stable investment.

Presence of Sufficient Risk Mitigation Mechanisms for Investors

Besides having state sponsorship, projects are likely to have successful bond placements if sufficient protection is provided to investors against default. Thus, having well-structured financing schemes with adequate and well-matched financial covenants will increase the viability of debt financing.

Stability of the Sector

Investors will also be more inclined to lend their funds to projects in sectors with relatively stable outlook, thereby ensuring predictability and a continuous revenue stream for debt servicing. A project which is functioning in a sector that is highly dynamic with diverse competitive pressures causing uncertainty in the market will not be so suited for infrastructure financing through bond issuance. Since most of the 9MP projects have a "public goods" or "utility" nature, there is much scope for bond financing for these projects.

Well-defined Cash Flows

As cash flow servicing of debt is the main aspect of project bonds that differentiate them from being conventional bond issuances; projects with well-defined cash flow projections will be suitable candidates for debt financing.

High Ratings

Given the considerations above (as well as additional items that are vital to the ratings process), projects which are able to secure a high rating (preferably AA and above) will have the high possibility of securing bond financing. This high rating is necessary given the investor profile that is prevalent in Malaysia, i.e. investors who favour the higher grade bonds. Most infrastructure projects (especially those implemented by the Government) will possess favourable characteristics that will enable a high bond rating to be achieved.

8.3 Risks and Opportunities for 9MP Projects Funded Through PFIs

Given the fiscal constraints faced the government and the large financing requirements to implement the 9MP, the government has promoted the concept of private financing initiatives (PFI).

The PFI is being introduced in the 9MP to offer more opportunities for private sector participation, particularly the Bumiputeras, while safeguarding consumer interests and enhancing economic efficiency and productivity, in

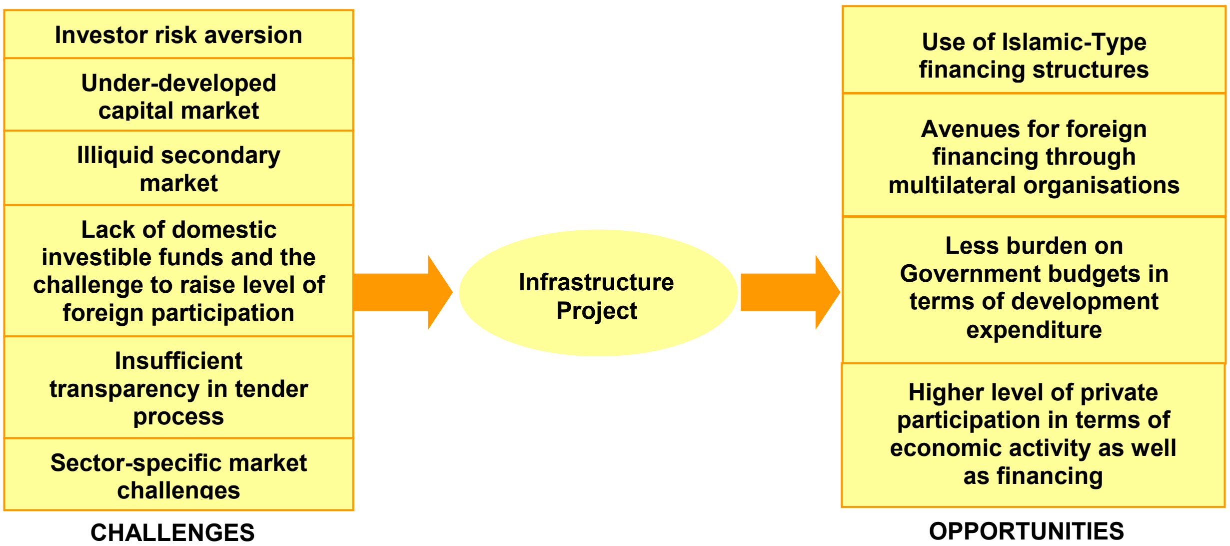
- ❑ development of infrastructure and utilities;
- ❑ management, operations and maintenance to improve the delivery of infrastructure facilities and public services, which include education and training; and
- ❑ privatised projects and entities.

The PFI involves several or all of the following elements as elaborated in the 9MP document:

- ❑ transfer to the private sector the responsibility to finance and manage a package of capital investment and services including the construction, management, maintenance, refurbishment and replacement of public sector asset such as buildings, infrastructure, equipment and other facilities, which creates a stand alone business.

- creation of asset and delivery of a service by the private sector to the public sector client with clear output specifications, maintenance, performance indicators and distribution of risks.
- payment to the private sector will be in the form of lease rental charges, corresponding to the level, quality and timeliness of the service provision throughout the concession period.
- lease rental payment is structured to guarantee a total return to the concessionaire's capital investment expenditures including financing cost repayment and profit to investment.
- asset and facilities will be transferred to the public sector at the end of the concession period.
- long term financing schemes established through local financial institutions, including the Employees Provident Fund.
- prospective companies must furnish evidence of technical and management expertise and have access to capital, including having a minimum paid-up capital of RM250,000 when proposing a project and provide documentary proof of financial support within 12 months upon signing of an agreement.
- project viability and sustainability will be based upon optimal distribution of risks between the public and private sectors with the government continuing to facilitate project implementation, particularly through legislation and land cost support while the private sector's capability will be utilized in managing risks associated with design, construction, operations and maintenance.

Figure 16. Risks and Opportunities for 9MP projects to be Financed under PFI



Challenges

Investor risk aversion deterring investors from investing in certain projects that are not highly rated can put a damper on investment activity and does pose a risk to the financing of these projects through this method. That is why it is imperative that any risks that are apparent given the nature of the project should be mitigated as early on as the structuring of the terms of debt issuance so as to obtain an adequate rating.

As mentioned earlier, the Malaysian bond market is maturing gradually, consequently, certain features such as the investor risk aversion and lack of avenues for investors who wish to trade their securities (secondary market) will be less of an impediment to investment activity in the long run.

There is also the notion of insufficient private funds in the domestic market to satisfy all infrastructure needs of the economy. Thus, there have been on-going efforts to seek Official Development Assistance (ODA) and to attract foreign fund inflow into the capital market or through equity stakes in infrastructure projects, in order to expand the supply of funds.

More transparency in the tender process is required in order to boost investor confidence to increase their participation in these Government-Linked infrastructure projects. This uncertainty or level of imperfect information can pose challenges in raising finance. Thus, credible concessionaires would be a good signal to the market of the viability of the project.

In all infrastructure projects, there are always risks concerned with the stability of the sector in which the infrastructure project is positioned in, which need to be accounted for. If sufficient covenants and credit support mechanisms are put in place in the terms of finance structuring and in any legal aspects of the contract, then most of this risk should be satisfactorily mitigated.

Opportunities

Islamic Financing is no longer a niche product in our market but has become widely used and is seen to be well-suited for infrastructure financing. Certain structures such as the "Istisna" are especially ideal for projects that have construction risk which is one of the main characteristics of infrastructure financing. There is an ample opportunity for project sponsors to tap into this market for funding especially from the pool of 'Petro'-dollars coming in from Arab nations.

Furthermore, other foreign sources of financing should see this sector as one that is a stable investment with potentially high returns. Risk can be mitigated by working through or in collaboration with multilateral agencies such as JBIC and MIGA.

The Government is no longer the sole bearer of risk with regards to the implementation of these infrastructure projects when they become open to Private Financing Initiatives; thus this will also relieve pressure on the Government budget and allocation of funds may be allocated to other areas that generate higher marginal social benefits to society.

Finally, greater participation by private entities both through direct financing or the actual implementation of the project, will create greater economic activity in terms of private investment and accelerate economic growth and income across the economy. This is turn will maximize returns to investors. Hence, the investment in infrastructure projects not only creates opportunities through the direct returns that can be derived from them, but also the security and robustness of these returns to investors through the multiplier effects that they create.

9. RECOMMENDATIONS FOR THE DEEPENING OF THE BOND MARKET FOR PRIVATE INFRASTRUCTURE DEVELOPMENT BASED ON THE MALAYSIAN EXPERIENCE

9.1 Key Challenges and Requirements

Among the key challenges identified in infrastructure financing in Malaysia are:

- huge financing requirement that exceeds the government financing capacity due to its fiscal deficit position.
- lack of investor sophistication as reflected by the continuing risk aversion in the bond market whereby issuers of high quality papers that are rated double A can access the bond market.
- absence of a financial guarantor institution to provide credit enhancements to bond issues.
- need for innovative project financing structures that could mitigate project risk while minimizing government's contingent liabilities.

9.2 Suggestions to Enhance the Role and Participation of the Public Sector

Given the above challenges, there is a need to focus on enhancing funding efficiency for infrastructure projects in Malaysia. There are three areas that the Public Sector could consider in order to enhance its role and participation in Private Sector infrastructure financing in the country.

A. Covering Construction Risk for Greenfield Projects

Greenfield projects, particularly those involving a strong off-take counter party, often raise financing for their projects via the ringgit bond market. However due to their green field status, despite all the necessary arrangements to address construction risk (fixed sum contract, cost overrun standby line, general construction risk insurance and the use of a reputable contactor), the highest rating achieved for a green field project is AA3.

As seen in the past, only with the successful completion of construction works, will the bonds be upgraded to the counter-party's rating. For the majority of the IPP projects in Malaysia, the ratings have been or will be upgraded to Tenaga's AA1 rating upon the completion of the construction works.

As the funding packages for the whole project are finalized before construction commences, the pricing for the bonds and the coupon rates are arranged on the basis of the AA3 rating incorporating the construction risk which is only in existence during the first few years. However, the higher coupons would have been locked in until the maturity of the debt instruments issued. There also exists the absence of suitable financial guarantee or insurance companies that are able to underwrite the completion of projects of this magnitude.

Thus, we see an opportunity for a strong entity who understands the risk elements pertaining to the construction work to provide a "construction performance guarantee" which covers the cost overrun, timeline delivery and performance specifications to enhance the project debt's ratings during the construction phase. This allows for the project bonds to be issued at higher ratings and thus lower financing costs for the life of the project. Considerable savings or improvement to the project economics can be made here as the higher guarantee fees paid will only be payable for the initial years.

B. Extending Project Funding Tenures/Addressing Refinancing Risk

As with other forms of financing, debt funding tenure plays a critical role in determining the affordability of building or owning an asset. In the highly liquid ringgit bond market, we see a severe limitation in the appetite for very long term bonds. Not many ringgit bonds have tenures exceeding 10-15 years.

This is particularly important for infrastructure projects which are often built for a useful life of 30 years and above have access to financing tenures that match the asset. Unfortunately, in Malaysia when a typical Power Purchase Agreement is signed for a 21-year period and a toll road concession agreement for 30 years, the shorter bond tenures exert tremendous pressure on the project economics to fully repay the project debt within the first 15 years (considering a construction period of 3-4 years).

There are several ways to provide assistance in this area. First is to invest in the longer dated tranches of the debt instruments to be issued. Alternatively, elements to address refinancing risk at the maturity of the limited tenured debt instruments can be introduced to facilitate a matching of the funding tenures with the concession periods or useful life of the asset. Another complementary initiative to support the structuring and pricing of financing instruments such as bonds, is for the Government to issue more bonds with longer tenures so that these can serve as benchmarks for the private sector. This will also assist the market in 'price discovery' given the presence of a greater volume of longer-term bonds in the market than in the situation previously.

C. Bridging Financing Gaps

Post 1997-98 financial crisis, most investors of project finance bonds have turned risk adverse, only seeking bonds rated AA and above. As such, while some projects with slightly higher risk profiles and lower equity support may still remain bankable but at a lower investment grade rating of A or even BBB, their access to the debt capital market has disappeared.

Of late, project promoters have not been able to secure concessions from the Government at terms which are equally favourable as the ones signed previously. We have progressed from the initial projects where traffic guarantees were provided for green field highways and unconditional "take or pay" terms were granted to Independent Power Producers. These make the concessions slightly more commercial in nature and appropriately, the commercial risks associated the projects become a key consideration amongst investors.

With increased risk profiles of projects of late combined with more stringent requirements of bond investors with regards to risk appetite, the resulting effect is a higher amount of equity capital to back the projects. Many project promoters are not in a position to pump in the adequate equity capital for projects often resulting in raising additional debt to fund their equity contribution resulting in a double leveraging effect in addition to their working capital requirements for the construction works.

To address the current stalemate, it may be feasible to consider setting up a Project Finance Equity Fund to lend equity support to project promoters. However, with the implementation of such a fund, projects in Malaysia qualifying for support from the must have transparent project cost disclosures and ideally, competitive bidding for the construction works. With transparency and good corporate governance, stronger returns to shareholders will be assured thus ensuring the success of such a fund.

In addition, measures to address the seemingly high risk aversion prevailing among bond investors will need to be taken. One possible solution is the setting of a high yield bond fund (not to be mistaken by junk bond funds which buys non-investment grade bonds) to focus on the A and BBB-rated bonds and managed by professionals who are well versed with the credit risks of companies. This outsourcing of funds from the Employees Provident Fund, Malaysia's largest bond investor as well as other institutional investors will help create a market for these purpose and lure more market participants into this sphere.

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April 17, 2007
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Appendix I. Chronology of Changes in the Regulatory Framework for the Malaysian Ringgit Bond Market

Date	Description
Oct 2005	Bank Negara Malaysia (BNM) issued the Guidelines on Regulated Short-Selling of Securities in the Wholesale Money Market. The introduction of regulated short-selling is part of BNM's continuous effort to further develop a liquid bond market with an active repo and securities borrowing and lending. This would also promote better risk management by facilitating hedging of interest rate risk.
Jan 2005	BNM announced the usage of repos as a monetary policy instrument. This would encourage market participants to actively use repos as an alternative funding instrument, enhance trading strategies and strengthen risk management capabilities by encouraging banks to move towards collateralised inter-bank transactions.
Oct 2004	Commercial banks and merchant banks were allowed to deduct their holdings of the Ringgit marketable debt securities in the trading book from eligible liabilities (EL) in the computation of Statutory Reserve Requirement (SRR). This would reduce the holding cost of these papers and promote secondary trading of such securities and level the playing field for commercial banks and merchant banks with that of the other players in the bond market.
Sep 2004	Recognising the significant development of Cagamas since its inception, the regulatory treatment for Cagamas securities was revised and Principal Dealers were also no longer required to bid for the primary issuance of Cagamas papers. These would promote a more market-based pricing of Cagamas securities and provide more flexibility for Cagamas to package new products and widen its investor base.
July 2004	Securities Commission (SC) introduced the Guidelines on the Offering of Islamic Securities (IS Guidelines). With the release of the IS Guidelines, the PDS Guidelines no longer apply to the issuance of Islamic securities in Malaysia.
Apr 2004	Introduction of a new interest rate framework. The new interest rate framework represents a change in the system of implementing monetary policy and promotes more efficient pricing by banking institutions. It does not represent a change in monetary policy. Under the new framework, each banking institution will now announce its own BLR based on its cost structure and business strategies. Banking institutions will also no longer be subject to the maximum spread of 2.5 percentage points above BLR. This is aimed at promoting more efficient pricing of the spectrum of financial products being offered. BNM liberalised its foreign exchange regulation allowing multilateral development banks (MDBs) or multilateral financial institutions (MFIs) to issue Ringgit denominated bonds in the Malaysia capital market. These bonds carry 0% risk weight under the risk-weighted capital ratio framework and allowed deduction from eligible liabilities for computation of statutory reserves requirements. For resident insurers, these bonds are qualified as low risk assets to support their margin of solvency.
Dec 2003	SC announced the release of the Guidelines on the Offering of Structured Products. The introduction of these guidelines will facilitate universal brokers, merchant banks, commercial banks including Islamic banks and performance-guaranteed Special Purpose Vehicles established by any of the above-mentioned institutions to issue "structured products".
Mar 2003	The Malaysian capital market entered the final phase of its move from merit-based to a DBR framework for fund raising. The SC released seven revised fund-raising guidelines, which includes the PDS Guidelines and the ABS guidelines.
Oct 2002	Universal Brokers were allowed to participate in the unlisted debt securities in order to expand market players in the domestic bond market. Following this measure, Universal Brokers have been admitted as members of FAST, BIDS and RENTAS.

Date	Description
Dec 2001	Issuance of Guideline on Securities Borrowing and Lending (SBL) Programme under RENTAS and Guidance Notes on Repurchase Agreement Transactions. The Guideline aims to provide a uniform set of rules to govern the conduct and obligations of the market participants with respect to the securities borrowing and lending transactions and repo and reverse repo transactions.
Oct 2001	Rules on FAST, BIDS & RENTAS (2001) were issued to replace the Rules issued in 1999.
Feb 2001	The Capital market Masterplan was launched. It sets the strategic position and future direction of capital market development for Malaysia.
Jul 2000	Following the amendments to the Securities Commission Act 1983, the Companies Act 1965, the Banking and Financial Institutions Act 1989, the Futures Industry Act 1993 and the Securities Industry (Central Depositories) Act 1991, the Securities Commission (SC) became the single regulator for all fund raising activities. The SC is the approving and registering authority for prospectuses in respect of all securities other than securities issued by unlisted recreational clubs. The Registrar of Companies is responsible for the lodgement of prospectuses. The introduction of the following guidelines and regulations, by the SC, which took effect on 1 July 2000: ▪ Guidelines on the Offering of Private Debt Securities ▪ Guidelines on Prospectus Content for Debentures ▪ Securities Commission (Shelf Registration Scheme for Debentures) Regulations 2000 ▪ Guidelines on Minimum Content Requirement for Trust Deeds ▪ Guidelines on Prospectuses for Equity ad Equity-linked Issues The Controller of Foreign Exchange issued the Exchange Control Guidelines on the Issuance of Private Debt Securities for Lead Arrangers to ensure compliance with the exchange control conditions/requirements under the new regulatory framework. The Banking and Financial Institutions (Amendments of Definition of Deposit) Order 2000 has been gazetted effective as of 1 July 2000. With this Order, non-licensed institutions would be allowed to enter into repurchase agreements (repo) transactions with licensed institutions under the Banking and Financial Institutions Act 1989.
Apr 2000	In a move to spur fund raising activities in the bond market, a general permission was granted by the Controller of Foreign Exchange for the issuance of private debt securities so long as the proceeds from the bond issues were not used to finance investments abroad or refinancing off-shore borrowings.
Oct 1999	The Capital Market Master Plan was initiated to chart the strategic positioning and future direction of the Malaysian capital market for the next ten years.
Jul 1999	Code of Conduct and Market Practices for Malaysian Scripless Securities Market Under the Real Time Electronic Transfer of Funds and Securities (RENTAS) System were introduced to facilitate the conversion from the SPEEDS system to the RENTAS system.
Jun 1999	The National Bond Market Committee (NBMC) was established to provide the policy direction and to rationalise the regulatory framework for the development of the bond market. As an initial step to rationalise the regulatory framework, NBMC announced that the Securities Commission would be the single regulatory authority for the supervision and regulation of the corporate bond market. The members of NBMC consist of the Ministry of Finance, Economic Planning Unit of the Prime Minister's Department, Bank Negara Malaysia, Securities Commission, the Registrar of Companies and the Malaysia Stock Exchange.
Aug 1996	Amendment to the Companies Act 1965 to widen the investors' base and to simplify the requirements on the submission of prospectus.
Mar 1993	The setting up of Securities Commission following the Government's decision to develop a more focused regulatory authority over an increasingly sophisticated capital market.

Date	Description
Jan 1990	Code of Conduct and Market Practices for Scripless Trading in the Malaysian Securities Market were introduced to lay down the basic market rules.
Jan 1989	Introduction of The Guidelines for the Issuance of Private Debt Securities to ensure orderly development of the market and to protect investors' interest.

Source: Bank Negara Malaysia

Appendix II. Bond Market Development Initiatives

Date	Initiative
8 Aug 2005	The issuance of RM2.05 billion Islamic Residential Mortgage-Backed Sukuk Musyarakah (IRMBS) by Cagamas MBS Berhad, represented the world's first rated residential mortgage-backed securities to be issued under Islamic principles. This is the second issuance of asset-backed securities by CMBS and backed by a pool of the Government's staff Islamic home financing. The introduction of IRMBS added new asset class for investors' preference and demonstrated Government's continuous and innovative effort to broaden and deepen the Islamic capital market.
25 Jul 2005	Daily indicative YTM for Government securities (conventional & Islamic) was implemented as to provide continuous market value information on Government securities to the market. Publication of Indicative YTM on private debt securities based on ratings and Selected Papers remain on a weekly basis i.e. on the 7th, 14th, 21st and end of every month.
14 Jul 2005	The first issuance of 20-year MGS amounting to RM1billion. Given the current excess liquidity, the longer dated MGS attracted good demand from investors. It will also lengthen the tenure of the MGS yield curve.
12 May 2005	Issuance of RM760 million Ringgit-denominated Wawasan Bonds by the International Bank for Reconstruction and Development (IBRD), also known as The World Bank. The issuance would contribute to further broaden and develop the country's Islamic capital market.
22 Apr 2005	Repo Facilities for PD was introduced with main purpose to facilitate market making activities for PDs and to promote competitive pricing. Repo auction of benchmark government securities for PD provide an avenue for PDs to obtain government securities if they are caught short in the process of performing market-making function.
1 Apr 2005	Further liberalisation of foreign exchange administration rules to facilitate non-residents and residents cross-border investments. Income from investment in Ringgit denominated debt securities is exempted from withholding tax.
13 Dec 2004	Issuance of the International Finance Corporation (IFC)'s Wawasan Islamic bonds. The MYR 500 million 'Wawasan Bonds' (approximately US$132 million equivalent) three-year bonds were issued as Bai Bithaman Ajil Islamic Securities. IFC is the first supranational to issue Islamic securities in the Malaysian market, and first supranational to issue domestic Islamic bonds in any market. This transaction provides a benchmark for future high-grade issuers and helps deepen overall the capital market and develop Islamic finance in Malaysia.
10 Nov 2004	Issuance of a new asset class, the Asian Development Bank (ADB)'s Putra bonds, marking a significant development in the domestic bond market. The RM400 million fixed rate bonds was the first issue by a foreign entity, the first supranational issue, and the first issue rated triple-A by Fitch, Moody's and Standard & Poors, the bonds which were offered through a bookbuilding process generated strong demand with total bids amounting to more than RM2.6 billion or 6.5 times the issue amount.
20 Oct 2004	The first issuance of Residential Mortgage Backed Securities (RMBS) by Cagamas MBS Berhad, a wholly owned subsidiary of Cagamas Berhad which were backed by Government staffs' housing loans. The securitisation represents a new strategic initiative to broaden the domestic bond market with a new asset class whilst simultaneously creating a benchmark yield curve for long-term Asset Backed Securities bonds. This inaugural RMBS issue is expected to enhance secondary trading of Asset Backed Securities (ABS). This is in line with the Government's effort in developing a vibrant and liquid bond market.
17 Sept 2004	The issuance of Islamic Treasury Bills has further added depth to the development of Islamic securities market.

Source: Bank Negara Malaysia (https://fast.bnm.gov.my/fastweb/public/MainPage.do)

Appendix III. Guidelines on The Offering of Private Debt Securities
REVISED EDITION – 26 July 2004
EFFECTIVE DATE – 26 July 2004

CONTENTS

1.0 INTRODUCTION

1.01 Effective as of 1 July 2000, any person who issues, offers for subscription or purchase, or makes an invitation to subscribe for or purchase ("issue, offer or make an invitation"), debentures would require the approval of the SC under section 32 of the Securities Commission Act 1993 (SCA). This would include private debt securities, such as, bonds, notes, loan stocks and commercial papers, whether convertible into equity or not and whether redeemable or otherwise.

1.02 For the purposes of the Guidelines on the Offering of Private Debt Securities, an approval from the SC would not be required if the transaction is exempted under

Schedule 1 SCA or if the instrument or transaction is exempted from the definition of "debenture" under sub-section 2(1) SCA.

1.03 These guidelines stipulate the criteria which must be met with regard to any issue, offer or invitation of private debt securities which comes under the ambit of the SCA. However, any issue, offer or invitation of Islamic securities would not fall under these guidelines but under the Guidelines on the Offering of Islamic Securities released by the SC on 26 July 2004.

1.04 Any person who seeks the approval of the SC under these guidelines should also ensure that such a person complies with the registration and disclosure requirements in respect of prospectuses and trust deeds as may be applicable under the SCA.

1.05 For the purposes of these guidelines:

(a) the term "debenture" has the meaning assigned to it under subsection 2(1) SCA and is used synonymously with the term "private debt securities"; and

(b) The terms "adviser" and "principal adviser" have the meanings assigned to it under the Policies and Guidelines on Issue/Offer of Securities (Issues Guidelines).

1.06 A public company should also ensure that the requirements in the Issues Guidelines applicable to it in general, are complied with in respect of all corporate transactions undertaken by it. Further, any issue, offer or invitation of private debt securities by a public company which is-

(a) capable of being converted into equity howsoever (example: convertible loan stocks, irredeemable convertible loan stocks and convertible bonds); or

(b) part of a composite scheme, would be subject to the requirement stipulated in the Issues Guidelines.

2.0 SUBMISSION OF PROPOSALS UNDER THESE GUIDELINES

2.01 Below are categories of persons that may act as principal adviser for the following types of proposals: Merchant banks, commercial banks, universal brokers or discount houses

- All proposals of private debt securities that are not capable of being converted into equity howsoever.

Merchant banks or universal brokers

- All proposals of private debt securities that are capable of being converted into equity.
- All proposals of private debt securities together with warrants.
- All proposals of private debt securities which are part of a composite scheme.

3.0 OFFERINGS OF PRIVATE DEBT SECURITIES UNDER A SHELF REGISTRATION SCHEME

3.01 Notwithstanding paragraph 1, any issue, offer or invitation of private debt securities under a shelf registration scheme can only be made in respect of private debt securities which are not capable of being converted into equity howsoever and which have no warrants attached.

3.02 Where a person seeks to issue, offer or make an invitation for private debt securities under a shelf registration scheme, such a person must comply with these Guidelines on the Offering of Private Debt Securities as well as the Securities Commission (Shelf Registration Scheme for Debentures) Regulations 2000 and any guidelines in relation thereto.

4.0 DOCUMENTS/INFORMATION REQUIRED

4.01 In relation to any issue, offer or invitation made pursuant to these guidelines, the issuer and principal adviser must submit to the SC such documents and information as set out in Appendix 1 as well as declarations as set out in Appendix 2.

4.02 Additionally, where the Issues Guidelines would apply to an issue, offer or invitation of private debt securities by a public company, the issuer and principal adviser shall submit such additional information and documents as may be required under the Issues Guidelines.

4.03 The SC may also require additional information from the issuer and its principal adviser, including due-diligence reports and rating reports if applicable, for post-vetting purposes at any time.

5.0 ELIGIBLE PERSONS

5.01 Any person who is a corporation within the meaning of sub-section 2(1) SCA is eligible under these guidelines.

5.02 This means any body corporate formed or incorporated or existing within Malaysia or outside Malaysia and includes any foreign company but does not include-

(a) any body corporate that is incorporated within Malaysia and is by notice of the Minister published in the Gazette declared to be a public authority or an instrumentality or agency of the public Government of Malaysia or of any State or to be a body corporate which is not incorporated for commercial purposes;

(b) any corporate sole;

(c) any society registered under any written law relating to co-operative societies; or

(d) any trade union registered under any written law as a trade union.

6.0 OTHER REGULATORY APPROVALS

6.01 All necessary approvals in relation to the issue, offer or invitation from other regulatory bodies, including the Controller of Foreign Exchange, must be obtained prior to the submission of any written declarations and information to the SC under these guidelines. Any conditions imposed by such regulatory bodies, if applicable, must continue to be complied with throughout the tenor of the private debt securities approved under these guidelines.

7.0 RATING REQUIREMENT

7.01 All issues, offers or invitations that come within the scope of these guidelines must be rated by a rating agency recognised by the SC. An indicative rating must have been obtained by the issuer at the time of submission of the declarations and information to the SC pursuant to paragraph 4.01.

7.02 Notwithstanding paragraph 7.01, a rating is not required for any issue, offer or invitation of-

(a) irredeemable convertible loan stocks; or

(b) such private debt securities-

(i) which are non-transferable and non-tradable; and

(ii) whose investors do not require a rating.

In the case of private debt securities falling under paragraph 7.02(b) the principal adviser must confirm in writing to the SC that both criteria have been met.

7.03 Where the credit rating of any issue, offer or invitation is below investment grade, the issuer must disclose the extent of credit risk to investors and their advisers in order to evaluate the risks relating to the private debt securities.

8.0 UNDERWRITING

8.01 The underwriting of any issue, offer or invitation shall be decided by the issuer and its principal adviser.

8.02 In the event that the issuer and its principal adviser should decide that no underwriting or only partial underwriting is required, the issuer must state the minimum level of subscription necessary to achieve the funding objectives of the issuer.

8.03 Paragraph 8.02 need not apply where-

(a) the utilisation of proceeds is solely for working capital purposes;

and

(b) the issuer has in place alternative funding arrangements.

8.04 Unless otherwise allowed in writing by the SC, where any issue, offer or invitation is under-subscribed and cannot meet the minimum level of subscription as required under paragraph 8.02, the issue, offer or invitation must be aborted and any consideration received for the purposes of subscription, where applicable, must be immediately returned to all subscribers.

9.0 MODE OF ISSUE

9.01 All issues of private debt securities under these Guidelines must be reported and/or tendered on the Fully Automated System for Issuing/Tendering("FAST") unless a listing is sought on any Malaysian stock exchange. The issuer and principal adviser must ensure that the issue complies with all rules and requirements of FAST.

9.02 Save for paragraph 11.01, all issues of private debt securities that are subject to these guidelines must be made under the Real Time Electronic Transfer of Funds and Securities ("RENTAS") system unless a listing is sought on any Malaysian stock exchange. The issuer and principal adviser must ensure that the issue complies with all rules and requirements of the RENTAS system.

10.0 UTILISATION OF PROCEEDS

10.01 Any funds raised from any issue, offer or invitation in Malaysia must not be channelled to finance such activities as may be announced by the National Bond Market Committee from time to time.

10.02 Funds raised in Malaysia by any person, including funds raised by any nonresident and non-resident controlled company, as defined under ECM Notices 1 and 8 respectively, shall comply with any requirements and regulations as may be issued by the Controller of Foreign Exchange from time to time.

11.0 ADDITIONAL REQUIREMENTS FOR DEBT PROGRAMMES

11.01 Where a debt programme involves an issuance of commercial papers or a combination of medium term notes and commercial papers-

(a) the tenor for such programmes must not exceed 7 years; and

(b) the issuance of private debt securities under the programme is not required to be made under the RENTAS system.

11.02 In all other debt programmes, (for example, stand-alone MTN programmes) the 7-year tenor restriction will not apply. However, issuers must state upfront the size and tenor of the programme at the point of submission to the SC.

11.03 In all debt programmes falling within paragraphs 11.01 and 11.02, issuers are also required to disclose to prospective investors the following information prior to each draw-down:

- Size of issue
- Utilisation of proceeds
- Minimum level of subscription (where applicable)
- Tenor
- Revisions of the rating, if any, since the date of the last draw-down

12.0 TIME FRAME FOR APPROVALS FROM THE SC

12.01 The SC would give its approval within 14 working days from the date of receipt of all declarations, complete information and documentation as required under these Guidelines in the following cases:

(a) Any issue, offer or invitation in respect of private debt securities that are not capable of being converted into equity howsoever;

(b) Any issue, offer or invitation in respect of private debt securities, together with warrants, that are not capable of being converted into equity howsoever; and

(c) Any issue, offer or invitation of private debt securities by a private company.

12.02 In circumstances where the Issues Guidelines would apply to the issue, offer or invitation of private debt securities, the time frame for approval by the SC set out under those Guidelines would apply.

12.03 Except in the case of a shelf registration scheme or a debt programme, any approval given by the SC under these guidelines must be implemented within six months from the date of the approval of the SC.

12.04 In the case of a shelf registration scheme or a debt programme, the initial draw-down must be made within 2 years from the date of the approval of the SC.

APPENDIX 1

1.0 Information to Be Submitted for the Purpose of Obtaining the Approval of the SC

1.01 Application letter disclosing the following items:

(a) Background information on the Issuer and/or Originator in the case of an Asset-Backed Securities (ABS) issue;

(b) Profile of Directors of Issuer;

(c) A description of the transaction and structure of the issue;

(d) Details of the utilisation of proceeds. If proceeds are to be utilised for project, details of the project;

(e) A schedule of utilisation of the issue proceeds;

(f) Details of expenses for the issue;

(g) Waiver(s) from complying with PDS Guidelines and/or specific approval pursuant to the Securities Commission Act 1993 sought and obtained from the SC for the issue (where applicable);

(h) Conflict of interest situations and appropriate mitigating measures;

(i) For issuances made for the purpose of refinancing an existing PDS issue, information on the existing PDS issue;

(j) Any other material information in relation to the issue; and

(k) Names, telephone numbers and facsimile number of the officers-incharge of Principal Adviser for the issue.

1.02 Principal terms and conditions of the Proposal

1.03 Principal terms and conditions of warrants, in the case of a PDS issue with warrants

1.04 Issuer's and principal adviser's declaration (Appendix 2)

1.05 Principal adviser's confirmation on compliance with all requirements of the Controller of Foreign Exchange in accordance with the Exchange Control Guidelines

1.06 Latest audited accounts of the issuer

1.07 Compliance checklist on the Guidelines on the Offering of Private Debt Securities

1.08 In the case where the Issuer is a public company – Declarations in accordance with Chapter 4 of the Issues Guidelines

1.09 In the case of a PDS with warrants issue:

(a) Term and conditions of the warrants;

(b) Financial effects of the warrants issue;

(c) Rationale for the attachment of warrants; and

(d) Compliance checklist on the Issues Guidelines with respect to warrants issue.

2.0 Information to be Submitted after Obtaining the Approval of the SC

2.01 In the case of debt programmes, issuer's notification to the SC of the following information following each draw-down:

(a) Size of issue;

(b) Mode of issue;

(c) Utilisation of proceeds;

(d) Minimum level of subscription (where applicable);

(e) Tenor;

(f) Actual yield or price; and

(g) Revisions of the rating, if any, since the date of the last draw-down

3.0 Principal Terms and Conditions of the Proposal

3.01 Background Information

(a) Issuer

(i) Name

(ii) Address

(iii) Business registration no.

(iv) Date/place of incorporation

(v) Date of listing (in case of a public listed company)

(vi) Status : (resident/non-resident controlled company

: Bumiputera/non-Bumiputera controlled company*

(vii) Principal activities

(viii) Board of directors

(ix) Structure of shareholdings and names of shareholders or, in the case of a public company, names of all substantial shareholders

(x) Authorised and paid-up capital.

(b) Originator (in the case of asset-backed securities)

(i) Name

(ii) Address

(iii) Business registration no.

(iv) Date/place of incorporation

(v) Date of listing (in case of a public listed company)

(vi) Status : (resident/non-resident controlled company

: Bumiputera/non-Bumiputera controlled company*

(vii) Principal activities

(viii) Board of directors

(ix) Structure of shareholdings and names of shareholders or, in the case of a public company, names of all substantial shareholders

(x) Authorised and paid-up capital.

3.02 Principal Terms and Conditions

(a) Names of parties involved in the proposed transaction, (where applicable)

(i) Principal adviser(s)/lead arranger(s)

(ii) Arranger(s)

(iii) Valuers

(iv) Solicitors

(v) Financial adviser

(vi) Technical adviser

* as defined in Guidance Note 6 of the Issues Guidelines

(vii) Guarantor

(viii) Trustee

(ix) Facility agent

(x) Primary subscriber(s) and amount subscribed (where applicable)

(xi) Underwriter(s) and amount underwritten

(xii) Central Depository

(xiii) Paying Agent

(xiv) Reporting Accountant

(xv) Others (please specify)

(b) Facility description

(c) Issue size (RM)

(d) Issue price (RM)

(e) Tenor of the facility/issue

(f) Interest/coupon (%) (please specify)

(g) Interest/coupon payment frequency

(h) Interest/coupon payment basis

(i) Yield to maturity (%)

(j) Security/collateral (if any)

(k) Details on utilisation of proceeds

(l) Sinking fund (if any)

(m) Rating

- Credit rating assigned ([Please specify if this is an indicative rating)
- Name of rating agency

(n) Form and denomination

(o) Mode of issue

(p) Selling restriction

(q) Listing status

(r) Minimum level of subscription (RM or %)

(s) Other regulatory approvals required in relation to the issue, offer or invitation and whether or not obtained (please specify)

(t) Conditions precedent

(u) Representations and warranties

(v) Events of default

(w) Principal terms and conditions for warrants (where applicable)

(x) Other principal terms and conditions for the issue

Appendix 2 (a)

Declaration by the Issuer

Date: (Date of Application)

The Chairman

Securities Commission

Dear Sir

ISSUER …(Name of Issuer)…

Declaration Pursuant to:

- Paragraph 4.01 of the Guidelines on the Offering of Private Debt Securities; and
- Paragraph 16.02(a) of the Policies and Guidelines on Issue/Offer of

Securities *

We, (Name of Issuer)…. are proposing to undertake the following proposals:-

(a) ………..

(b) ………..

(c) ………..

(hereinafter referred to as "the Proposal").

2. We confirm that after having made all reasonable enquiries, and to the best of our knowledge and belief, there is no false or misleading statement contained in, or material omission from, the information that is provided to the adviser(s)/expert(s) or to the SC in relation to the above Proposal.
3. We declare that we are satisfied after having made all reasonable enquiries that the Proposal is in full compliance with the following:

   (a) The Policies and Guidelines on Issue/Offer of Securities1;

   (b) The Guidelines on the Offering of Private Debt Securities;

   (c) The Guidelines on the Offering of Asset-Backed Securities as may be applicable to the issuer during the tenor of the Proposal*;

   (d) The requirements of the Controller of Foreign Exchange with respect to the Proposal*; and

   (e) Other requirements under the Securities Commission Act 1993 as may be applicable.
4. Save as otherwise disclosed in the attachment accompanying this declaration, the Company2 has not-

   (a) been convicted or charged with any offence under the securities laws, corporations laws or other laws involving fraud or dishonesty in a court of law, for the last 10 years prior to the submission; and

(b) been subject to any action by the stock exchange for any breach of the listing requirements or rules issued by the stock exchange, for the past five years prior to the submission.

5. We declare the following:
   (a) the Proposal involves/does not involve any acquisition of substantial foreign assets, in accordance with Chapter 11 of the Policies and Guidelines on Issue/Offer of Securities3;
   (b) the Proposal results/does not result in a significant change in the business direction of the listed company, in accordance with Chapter 12 of the Policies and Guidelines on Issue/Offer of Securities4;
   (c) the Issuer is/is not a distressed listed company, in accordance with Chapter 13 of the Policies and Guidelines on Issue/Offer of Securities5;
   (d) the Proposal is/is not a related-party transaction in accordance with Chapter 10 of the Policies and Guidelines on Issue/Offer of Securities6;
6. We declare that we will ensure continuous compliance with the requirements and conditions imposed by the SC in relation to the above Proposal.
7. We undertake to provide to the SC all such information as the SC may require in relation to the Proposal.

The above Declaration has been signed by me as …(designation of director)… of the Issuer pursuant to authority granted to me by a resolution of the Board of Directors

on …(date of resolution)…
Yours faithfully,

……………………….
Signature
Name:
Name of Issuer:
Date:

Notes

1 Applicable only in relation to Proposals falling under the Policies and Guidelines on Issue/Offer of Securities. Where an application is being made to the SC for proposals under the assessment approach and exemptions are being sought, to insert the words "except paragraph(s) ..(refer to paragraph where exemption is being sought).. where exemption(s) is/are being sought as part of the submission to the SC."

2 Applicable only to proposals in relation to public companies.

3 Applicable only to the issue, offer or listing of equity or equitylinked securities by public companies.

4, 5, 6 Applicable only to proposals in relation to listed companies.

* To delete if not applicable

Appendix 2 (b)

Declaration by the Principal Adviser
Date: (Date of Application)
The Chairman
Securities Commission
Dear Sir
ISSUER (Name of Issuer)

Declaration Pursuant to:

- Paragraph 4.01 of the Guidelines on the Offering of Private Debt

Securities; and

- Paragraph 16.02 of the Policies and Guidelines on Issue/Offer of

Securities *
(Name of Issuer)…. is proposing to undertake the following proposals:-

(a) ……….
(b) ……….
(c) ……….

(hereinafter referred to as "the Proposal").

We,..(Name of Principal Adviser)…, are advising ..(Name of Issuer).. on the Proposal.

2. We confirm that after having made all reasonable enquiries, and to the best of our knowledge and belief, there is no false or misleading statement contained in, or material omission from, the information that is provided to the SC in relation to the above Proposal.
3. We declare that we are satisfied after having made all reasonable enquiries that the Proposal is in full compliance with the following:-
   (a) The Policies and Guidelines on Issue/Offer of Securities1;
   (b) The Guidelines on the Offering of Private Debt ;
   (c) The Guidelines on the Offering of Asset-Backed Securities *;
   (d) The requirements of the Controller of Foreign Exchange with respect to the Proposal*; and
   (e) Other requirements under the Securities Commission Act 1993 as may be applicable.
4. We declare the following:-

(a) the Proposal involves/does not involve any acquisition of substantial foreign assets, in accordance with Chapter 11 of the Policies and Guidelines on Issue/Offer of Securities[2];

(b) the Proposal results/does not result in a significant change in the business direction of the listed company, in accordance with Chapter 12 of the Policies and Guidelines on Issue/Offer of Securities[3];

(c) the Issuer is/is not a distressed listed company, in accordance with Chapter 13 of the Policies and Guidelines on Issue/Offer of Securities[4];

(d) the Proposal is/is not a related-party transaction in accordance with Chapter 10 of the Policies and Guidelines on Issue/Offer of Securities[5];

5. We undertake to immediately inform the SC if it has come to our knowledge that the Issuer has breached or failed to comply with such requirements, after submission of this declaration relating to the Proposal until the implementation of the Proposal.
6. We undertake to provide to the SC all such information as the SC may require in relation to the Proposal.

Yours faithfully

………………………

Signature

Name:

Name of Principal Adviser:

Date:

* To delete if not applicable

Notes

1 Applicable only in relation to Proposals falling under the Policies and Guidelines on Issue/Offer of Securities. Where an application is being made to the SC for proposals under the assessment approach and exemptions are being sought, to insert the words "except paragraph(s) .(refer to paragraph where exemption is being sought).. where exemption(s) is/are being sought as part of the submission to the SC."

2 Applicable only to the issue, offer or listing of equity or equitylinked securities by public companies.

3, 4, 5 Applicable only to proposals in relation to listed companies.

* To delete if not applicable

GUIDELINES ON THE OFFERING OF ISLAMIC SECURITIES
26 July 2004

CONTENTS

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1.0 INTRODUCTION

1.01 Any person who issues, offers for subscription or purchase, or makes an invitation to subscribe for or purchase ("issue, offer or invitation"), Islamic securities would require the approval of the SC under section 32 of the Securities Commission Act 1993 (SCA).

1.02 For the purposes of these Guidelines, the SC's approval would not be required if the transaction is exempted under Schedule 1 of the SCA.

1.03 These Guidelines stipulate the criteria which must be met with regard to any issue, offer or invitation of Islamic securities which comes under the ambit of the SCA.

1.04 Any person who seeks the approval of the SC under these Guidelines should also ensure that such person complies with the registration and disclosure requirements in respect of prospectuses and trust deeds as may be applicable under the SCA.

1.05 For the purpose of these Guidelines:

(a) The term "Islamic securities" means any securities issued pursuant to any Syariah principles and concepts approved by the Syariah Advisory Council (SAC) of the SC as set out in Appendix 1.

(b) The terms "adviser" and "principal adviser" have the meanings assigned to it under the SC's " Policies and Guidelines on Issue/Offer of Securities" ("Issues Guidelines").

(c) All issues, offers or invitation of Islamic securities, including those involving the issuance of sukuk and those made under principles of Musyarakah and Mudharabah, must comply with Division 4 Part IV of the SCA.

(d) In the event an Islamic securities arrangement falls within the definition of "unit trust scheme" or "prescribed investment scheme" under the SCA, such Islamic securities shall not be subject to Division 5 Part IV of the SCA.

(e) For this purpose, the term "debenture" and "borrower" in Division 4 of Part IV of the SCA shall refer to "Islamic securities" and "issuer of Islamic securities" respectively.

1.06 Where any Syariah principle or concept applied in the structuring of an issue, offer or invitation is based on a principle or concept other than which is stated in Appendix 1, the approval of the SAC must be obtained prior to any submission of declarations and information to the SC under paragraph 4.01.

1.07 A public company should also ensure that the requirements in all other guidelines issued by the SC, where applicable, are complied with in respect of all corporate transactions undertaken by it.

1.08 For Islamic securities issued pursuant to an asset-backed securitization transaction, the Guidelines on the Offering of Asset-Backed Securities will also apply.

2.0 SUBMISSION OF PROPOSALS UNDER THESE GUIDELINES

2.01 Below are categories of persons that may act as principal adviser for the following types of proposals:

(a) Merchant banks, commercial banks, universal brokers or discount houses

  (i) All proposals for the issuance of Islamic securities that are not capable of being converted into equity howsoever

(b) Merchant banks or universal brokers

  (i) All proposals for the issuance of Islamic securities that are capable of being converted into equity

  (ii) All proposals for the issuance of Islamic securities together with warrants

  (iii) All proposals for the issuance of Islamic securities which are part of a composite scheme

3.0 OFFERINGS OF ISLAMIC SECURITIES UNDER A SHELF REGISTRATION SCHEME

3.01 Notwithstanding paragraph 1.01, any issue, offer or invitation of Islamic securities under a shelf registration scheme can only be made in respect of Islamic securities which falls within the definition of "debenture" under the SCA, are not capable of being converted into equity howsoever and which have no warrants attached.

3.02 A person making an issue, offer or an invitation for Islamic securities under a shelf registration scheme must comply with these Guidelines as well as the Securities Commission (Shelf Registration Scheme for Debentures) Regulations 2000 and any guidelines in relation thereto.

4.0 DOCUMENTS/INFORMATION REQUIRED

4.01 In relation to any issue, offer or invitation made pursuant to these Guidelines, the issuer and principal adviser must submit to the SC such documents and information as set out in Appendix 2 as well as declarations as set out in Appendix 3.

4.02 Additionally, where the Issues Guidelines would apply to an issue, offer or invitation of Islamic securities by a public company, the issuer and principal adviser shall submit such additional information and documents as may be required under the Issues Guidelines.

4.03 The SC may also require additional information from the issuer and its principal adviser, including due-diligence reports and rating reports if applicable, for postvetting purposes at any time.

5.0 ELIGIBLE PERSONS

5.01 Any person who is a corporation within the meaning of sub-section 2(1) of the SCA is eligible under these Guidelines.

5.02 "Corporation" referred to in paragraph 5.01 means any body corporate formed or incorporated or existing within Malaysia or outside Malaysia and includes any foreign company but does not include-

(a) Any corporate that is incorporated within Malaysia and is by notice of the Minister published in the Gazette declared to be a public authority or an instrumentality or agency of the public Government of Malaysia or of any State or to be a body corporate which is not incorporated for commercial purposes;

(b) Any corporate sole;

(c) Any society registered under any written law relating to co-operative societies; or

(d) Any trade union registered under any written law as a trade union.

6.0 APPOINTMENT OF SYARIAH ADVISER

6.01 In relation to Islamic Securities that comes within the ambit of these Guidelines, the issuer must appoint either:

(a) An independent Syariah adviser who has been approved by the SC and who meets the following criteria:

(i) is not an undischarged bankrupt;

(ii) has not been convicted for any offence arising out of a criminal proceeding;

(iii) is of good repute and character;

(iv) possesses the necessary qualifications and expertise particularly in fiqh muamalah and Islamic jurisprudence, and has a minimum of 3 years experience or exposure in Islamic finance; or

(b) An Islamic bank or a licensed institution approved by Bank Negara Malaysia to carry out Islamic Banking Scheme or Skim Perbankan Islam, to advise on all aspects of the Islamic securities including documentation, structuring, investment as well as other administrative and operational matters in relation to the Islamic securities, and ensure compliance with applicable Syariah principles and relevant resolutions and rulings made by the SAC from time to time. In the event of doubt, clarification should be sought from the SAC.

6.02 Where the applicant for independent Syariah adviser under paragraph 6.01 above is a corporation, such corporation must engage at least one Syariah expert who meets the criteria stipulated in paragraph 6.01(a). In addition, the Syariah expert and the corporation concerned should not have breached any securities or banking laws since the date of incorporation nor have a winding up order or resolution passed against the corporation.

6.03 Submission to the SC to be approved as an independent Syariah adviser should be addressed to:

Head
Islamic Capital Market Department
Securities Commission
No.3 Persiaran Bukit Kiara
50490 Bukit Kiara, Kuala Lumpur

7.0 OTHER REGULATORY APPROVALS

7.01 All necessary approvals in relation to the issue, offer or invitation from other regulatory bodies, including the Controller of Foreign Exchange, must be obtained prior to the submission of any written declarations and information to the SC under these Guidelines. Any conditions imposed by such regulatory bodies, if applicable, must continue to be complied with throughout the tenor of the Islamic securities approved under these Guidelines.

8.0 RATING REQUIREMENT

8.01 All issues, offers or invitations that come within the scope of these Guidelines must be rated by a rating agency recognised by the SC. An indicative rating must have been obtained by the issuer at the time of submission of the declarations and information to the SC pursuant to paragraph 4.01.

8.02 Notwithstanding paragraph 8.01, a rating is not required for any issue, offer or invitation of Islamic securities:

(a) which are non-transferable and non-tradable; and
(b) whose investors do not require a rating.

The principal adviser must confirm in writing to the SC that both criteria highlighted above have been met.

8.03 Where the credit rating of any issue, offer or invitation is below investment grade, the issuer must disclose the extent of credit risk to investors and their advisers in order to evaluate the risks relating to the Islamic securities.

9.0 UNDERWRITING

9.01 The underwriting of any issue, offer or invitation shall be decided by the issuer and its principal adviser.

9.02 In the event that the issuer and its principal adviser should decide that no underwriting or only partial underwriting is required, the issuer must state the minimum level of subscription necessary to achieve the funding objectives of the issuer.

9.03 Paragraph 9.02 does not apply where:

(a) the utilisation of proceeds is solely for working capital purposes; and

(b) the issuer has in place alternative funding arrangements.

9.04 Unless otherwise allowed in writing by the SC, where any issue, offer or invitation is under-subscribed and cannot meet the minimum level of subscription as required under paragraph 9.02, the issue, offer or invitation must be aborted and any consideration received for the purposes of subscription, where applicable, must be immediately returned to all subscribers.

10.0 MODE OF ISSUE

10.01 All issues of Islamic securities under these Guidelines must be reported and/or tendered on the Fully Automated System for Issuing/Tendering ("FAST") unless a listing is sought on any Malaysian stock exchange. The issuer and principal adviser must ensure that the issue complies with all rules and requirements of FAST.

10.02 Save for paragraph 12.01, all issues of Islamic securities that are subject to these Guidelines must be made under the Real Time Electronic Transfer of Funds and Securities ("RENTAS") system unless a listing is sought on any Malaysian stock exchange. The issuer and principal adviser must ensure that the issue complies with all rules and requirements of the RENTAS system.

11.0 UTILISATION OF PROCEEDS

11.01 Any funds raised from any issue, offer or invitation in Malaysia must not be channelled to finance such activities as may be announced by the National Bond Market Committee from time to time.

11.02 Funds raised in Malaysia by any person, including funds raised by any nonresident and non-resident controlled company, as defined under ECM Notices 1 and 8 respectively, shall comply with any requirements and regulations as may be issued by the Controller of Foreign Exchange from time to time.

12.0 ADDITIONAL REQUIREMENTS FOR ISLAMIC SECURITIES PROGRAMMES

12.01 Where an Islamic securities programme involves an issuance of commercial papers or a combination of medium term notes and commercial papers:-

(a) the tenor for such programmes must not exceed 7 years; and

(b) the issuance of Islamic securities under the programme is not required to be made under the RENTAS system.

12.02 In all other Islamic securities programmes, (for example, stand-alone Islamic MTN programmes) the 7-year tenor restriction will not apply. However, issuers must state upfront the size and tenor of the programme at the point of submission to the SC.

12.03 In all Islamic securities programmes falling within paragraphs 12.01 and 12.02, issuers are also required to disclose to prospective investors the following information prior to each drawdown:

(a) Size of issue

(b) Utilisation of proceeds

(c) Minimum level of subscription (where applicable)

(d) Tenor

(e) Revisions of the rating, if any, since the date of the last draw down

(f) The identified underlying assets and value

13.0 DISCLOSURE REQUIREMENTS TO INVESTORS RELATING TO ISLAMIC SECURITIES ISSUED UNDER PRINCIPLES OF PROFIT SHARING (MUDHARABAH)/PROFIT AND LOSS SHARING (MUSYARAKAH)

13.1 Where a prospectus is not required, an information memorandum must be made available to investors for any issue, offer or invitation of Islamic securities issued under principles of profit sharing (Mudharabah) or profit and loss sharing (Musyarakah).

14.0 TIME FRAME FOR APPROVAL FROM THE SC

14.01 The SC would give its approval within 14 working days from the date of receipt of all declarations, complete information and documentation as required under these Guidelines in the following cases:

(a) Any issue, offer or invitation in respect of Islamic securities that is not capable of being converted into equity howsoever;

(b) Any issue, offer or invitation in respect of Islamic securities, together with warrants, that are not capable of being converted into equity howsoever; and

(c) Any issue, offer or invitation of Islamic securities by a private company.

14.02 In circumstances where the Issues Guidelines would apply to the issue, offer or invitation of Islamic securities, the time frame for approval by the SC set out under those Guidelines would apply.

14.03 Except in the case of a shelf registration scheme or an Islamic securities programme, any approval given by the SC under these Guidelines must be implemented within 6 months from the date of the SC's approval.

14.04 In the case of a shelf registration scheme or an Islamic securities programme, the initial draw-down must be made within 2 years from the date of the SC's approval.

A-1

APPENDIX 1

- Approved Syariah Concepts and Principles for the Purpose of Structuring,
- Documenting and Trading of Islamic Securities

The following are acceptable Syariah concepts and principles for Islamic securities -

A. Primary principles

- Deferred-Payment Sale [Bai' Bithaman Ajil (BBA)]

A contract that refers to the sale and purchase transaction for the financing of an asset on a deferred and an instalment basis with a pre-agreed payment period. The sale price will include a profit margin.

- Sale with Immediate Repurchase [Bai' 'Inah]

A contract which involves the sale and buy back transaction of an asset by a seller. A seller will sell the asset to a buyer on a cash basis. The seller will immediately buy back the same asset on a deferred payment basis at a price that is higher than the cash price. It can also be applied when a seller sells the asset to a buyer on a deferred basis. The seller will later buy back the same asset on a cash basis at a price which is lower than the deferred price.

- Supply Sale [Bai' Istijrar]

A contract between a client and a supplier, whereby the supplier agrees to supply a particular product on an ongoing basis, for example monthly, at an agreed price and on the basis of an agreed mode of payment.

- Advance Purchase [Bai' Salam]

A sale and purchase contract whereby the payment is made in cash at the point of contract but the delivery of the asset purchased will be deferred to a pre-determined date.

- Sale and Repurchase [Bai' Wafa']

A contract with the condition that when the seller pays back the price of goods sold, the buyer returns the goods to the seller.

- Leasing [Ijarah]

A manfaah (usufruct) type of contract whereby a lessor (owner) leases out an asset or an equipment to its client at an agreed rental fee and pre-determined lease period upon the ‘aqad (contract). The ownership of the leased equipment remains in the hands of the lessor.

- Lease to Purchase [Ijarah Thumma Bai`]

A contract which begins with an Ijarah contract for the purpose of renting out a lessor’s asset to a lessee. Consequently, at the end of the lease period, the lessee will purchase the asset at an agreed price from the lessor by executing a purchase (Bai`) contract.

- Purchase Order [Istisna’]

A purchase contract of an asset whereby a buyer will place an order to purchase the asset which will be delivered in the future. In other words, the buyer will require a seller or a contractor to deliver or construct the asset that will be completed in the future according to the specifications given in the sale and purchase contract. Both parties of the contract will decide on the sale and purchase prices as they wish and the settlement can be delayed or arranged based on the schedule of the work completed.

- Profit-Sharing [Mudharabah]

A contract which is made between two parties to finance a business venture. The parties are a rabb al-mal or an investor who solely provides the capital and a mudharib or an entrepreneur who solely manages the project. If the venture is profitable, the profit will be distributed based on a pre-agreed ratio. In the event of a business loss, the loss shall be borne solely by the provider of the capital.

- Cost-Plus Sale [Murabahah]

A contract that refers to the sale and purchase transaction for the financing of an asset whereby the cost and profit margin (mark-up) are made known and agreed by all parties involved. The settlement for the purchase can be either on a deferred lump sum basis or on an instalment basis, which will be specified in the agreement.

- Profit and Loss-Sharing [Musyarakah]

A partnership arrangement between two parties or more to finance a business venture whereby all parties contribute capital either in the form of cash or in kind for the purpose of financing the business venture. Any profit derived from the venture will be distributed based on a pre-agreed profit sharing ratio, but a loss will be shared on the basis of equity participation.

- Benevolent Loan [Qardh Hasan]

  A contract of loan between two parties on the basis of social welfare or to fulfill a short-term financial need of the borrower. The amount of repayment must be equivalent to the amount borrowed. It is however legitimate for a borrower to pay more than the amount borrowed as long as it is not stated or agreed at the point of contract.

B. Supplementary concepts and principles

- Debt Trading [Bai' Dayn]

  A transaction that involves the sale and purchase of securities or debt certificates that conforms with Syariah. Securities or debt certificates will be issued by a debtor to a creditor as an evidence of indebtedness.

- Open-Bidding Trading [Bai' Muzayadah]

  An action by a person to sell his asset in the open market through a bidding process among potential buyers. The asset for sale will be awarded to the person who has offered the highest bid/price. This is also known as the sale and purchase transaction based on tender.

- Guarantee [Kafalah]

  A contract of guarantee whereby a guarantor underwrites any claim and obligation that should be fulfilled by an owner of the asset. This concept is also applicable to a guarantee provided on a debt transaction in the event a debtor fails to fulfill his debt obligation. The same definition can be applied for Dhaman.

- Ownership Right [Hak Tamalluk]

  An asset in the form of ownership rights as classified by Syariah which are tradable.

- Gift [Hibah]

  A gift awarded to a person on voluntary basis.

- Remittance [Hiwalah]

  A contract that allows a debtor to transfer his debt obligation to a third party.

- Rebate [Ibra']

  An act by a person to withdraw his rights to collect payment from a person who has the obligation to repay the amount borrowed from him.

- Pre-Agreed Contract [Ittifaq Dhimni]

  A sale and re-purchase of the underlying asset of which the prices are agreed by the parties prior to the completion of the contract. This is an external agreement which must be reached before the contract can be concluded to allow for the bidding process (Bai' al-Muzayadah) to take place.

- Collateral [Rahn]

  An act whereby a valuable asset is made as a collateral for a debt. The collateral will be utilised to settle the debt when a debtor is in default.

- Securities [Sukuk]

  A document or certificate which represents the value of an asset.

- Fee [Ujrah]

  A financial charge for the utilisation of services or manfaat. In the context of today's economy, it can be in the form of salary, wage, allowance, commission and alike.

- Agency [Wakalah]

  A contract which gives the power to a person to nominate another person to act on his behalf as long as he is alive based on the agreed terms and conditions.

APPENDIX 2

1.0 Information to be Submitted for the Purpose of Obtaining the Approval of the SC.

1.01 Application letter disclosing the following items:

(a) Background information on the Issuer and/or Originator in the case of an Asset-Backed Securities (ABS) issue;

(b) Profile of Directors of Issuer;

(c) A description of the transaction and structure of the issue;

(d) Details of the utilisation of proceeds. If proceeds are to be utilised for project, details of the project;

(e) A schedule of utilisation of the issue proceeds;

(f) Details of expenses for the issue;

(g) Waiver(s) from complying with the Guidelines on the Offering of Islamic Securities and/or specific approval pursuant to the Securities Commission Act 1993 sought and obtained from the SC for the issue (where applicable);

(h) Specific approval sought and obtained from the SC in relation to the appointment of an independent Syariah Adviser and/or applicable Syariah principle or concept;

(i) Conflict of interest situations and appropriate mitigating measures;

(j) For issuances made for the purpose of refinancing an existing financing facility (which involves the issuance of securities), information on the existing financing facility;

(k) Any other material information in relation to the issue; and

(l) Names, telephone numbers and facsimile number of the officers-in charge of the Principal Adviser for the issue.

1.02 Principal Terms and Conditions of the Proposal

1.03 Principal Terms and Conditions of Warrants, in the case of an Islamic Securities issue with warrants

1.04 Issuer's and Principal Adviser's Declaration (Appendix 3)

1.05 Principal Adviser's confirmation on compliance with all requirements of the Controller of Foreign Exchange in accordance with the Exchange Control Guidelines

1.06 Latest audited accounts of the Issuer

1.07 Compliance checklist on the Guidelines on the Offering of Islamic Securities

1.08 In the case where the Issuer is a public company and the SC's Issues Guidelines applies to such Issuers – Declarations in accordance with Chapter 4 of the Issues Guidelines

1.09 In the case of Islamic securities with warrants issue:

(a) Terms and conditions of the warrants;
(b) Financial effects of the warrants issue;
(c) Rationale for the attachment of warrants; and
(d) Compliance checklist on the SC's Issues Guidelines with respect to the warrants issue.

2.0 Information to be Submitted After Obtaining the Approval of the SC

2.01 In the case of Islamic securities programmes, Issuer's notification to the SC of the following information following each draw-down:

(a) Size of issue;
(b) Mode of issue;
(c) Utilisation of proceeds;
(d) Minimum level of subscription (where applicable);
(e) Tenor;
(f) Actual yield or price;
(g) Revisions of the rating, if any, since the date of the last draw-down; and
(h) The identified underlying asset and value.

3.0 Principal Terms and Conditions of the Proposal

3.01 Background Information

(a) Issuer
  (i) Name
  (ii) Address
  (iii) Business registration no.
  (iv) Date/place of incorporation
  (v) Date of listing (in case of a public listed company)
  (vi) Status : resident/non-resident controlled company: Bumiputera/non-Bumiputera controlled company*
  (vii) Principal activities
  (viii) Board of directors
  (ix) Structure of shareholdings and names of shareholders or, in the case of a public company, names of all substantial shareholders
  (x) Authorised and paid-up capital.

(b) Originator (in the case of asset-backed securities)
  (i) Name
  (ii) Address
  (iii) Business registration no.
  (iv) Date/place of incorporation

(v) Date of listing (in case of a public listed company)

(vi) Status: resident/non-resident controlled company: Bumiputera/non-Bumiputera controlled company*

(vii) Principal activities

(viii) Board of directors

(ix) Structure of shareholdings and names of shareholders or, in the case of a public company, names of all substantial shareholders

(x) Authorised and paid-up capital.

3.02 Principal Terms and Conditions

(a) Names of parties involved in the proposed transaction (where applicable)

(i) Principal adviser(s)/Lead arranger(s)

(ii) Arranger(s)

(iii) Valuers

(iv) Solicitors

(v) Financial adviser

(vi) Technical adviser

(vii) Guarantor

(viii) Trustee

(ix) Facility Agent

(x) Primary Subscriber(s) and amount subscribed (where applicable)

(xi) Underwriter(s) and amount underwritten

(xii) Syariah adviser

(xiii) Central depository

(xiv) Paying agent

(xv) Reporting accountant

(xvi) Others (please specify)

(b) Islamic principle used

(c) Facility description

(d) Issue size (RM)

(e) Issue price

(f) Tenor of the facility/issue

(g) Coupon/profit or equivalent rate (%) (please specify)

(h) Coupon/profit payment frequency and basis

(i) Yield to maturity (%)

(j) Security/collateral (if any)

(k) Details on utilisation of proceeds

(l) Sinking fund (if any) (m) Rating

- Credit rating assigned [Please specify if this is an indicative rating]
- Name of rating agency

(n) Form and denomination

(o) Mode of issue

(p) Selling restriction

(q) Listing status

(r) Minimum level of subscription (RM or %)

(s) Other regulatory approvals required in relation to the issue, offer or invitation and whether or not obtained [please specify]

(t) Identified assets

(u) Purchase and selling price/rental (where applicable)

(v) Conditions precedent

(w) Representations and warranties

(x) Events of default

(y) Principal terms and conditions for warrants (where applicable)

(z) Other principal terms and conditions for the issue

Appendix 3 (a)

Declaration by the Issuer
Date: (Date of Application)
The Chairman
Securities Commission
Dear Sir
ISSUER (Name of Issuer)

Declaration Pursuant to:

- Paragraph 4.01 of the Guidelines on the Offering of Islamic Securities; and
- Paragraph 16.02 of the Policies and Guidelines on Issue/Offer of

Securities*

We, (Name of Issuer) are proposing to undertake the following proposals:-

(a) ………..

(b) ………..

(c) ………..

(hereinafter referred to as "the Proposal").

2. We confirm that after having made all reasonable enquiries, and to the best of our knowledge and belief, there is no false or misleading statement contained in, or material omission from, the information that is provided to the adviser(s)/expert(s) or to the SC in relation to the above Proposal.
3. We declare that we are satisfied after having made all reasonable enquiries that the Proposal is in full compliance with the following:-
   (a) The Policies and Guidelines on Issue/Offer of Securities1;
   (b) The Guidelines on the Offering of Islamic Securities;
   (c) The Guidelines on the Offering of Asset-Backed Securities as may be applicable to the issuer during the tenor of the Proposal*;
   (d) The requirements of the Controller of Foreign Exchange with respect to the Proposal*; and
   (e) Other requirements under the Securities Commission Act 1993 as may be applicable.
4. Save as otherwise disclosed in the attachment accompanying this declaration, the Company2 has not-
   (a) been convicted or charged with any offence under the securities laws, corporations laws or other laws involving fraud or dishonesty in a court of law, for the last 10 years prior to the submission; and

(b) been subject to any action by the stock exchange for any breach of the listing requirements or rules issued by the stock exchange, for the past 5 years prior to the submission.

5. We declare the following:
   (a) The Proposal involves/does not involve any acquisition of substantial foreign assets, in accordance with Chapter 11 of the Policies and Guidelines on Issue/Offer of Securities[3];
   (b) The Proposal results/does not result in a significant change in the business direction of the listed company, in accordance with Chapter 12 of the Policies and Guidelines on Issue/Offer of Securities[4];
   (c) The Issuer is/is not a distressed listed company, in accordance with Chapter 13 of the Policies and Guidelines on Issue/Offer of Securities[5];
   (d) The Proposal is/is not a related-party transaction in accordance with Chapter 10 of the Policies and Guidelines on Issue/Offer of Securities[6];
6. We declare that we will ensure continuous compliance with the requirements and conditions imposed by the SC in relation to the above Proposal.
7. We undertake to provide to the SC all such information as the SC may require in relation to the Proposal.

* To delete if not applicable

The above Declaration has been signed by me as …(designation of director)… of the Issuer pursuant to authority granted to me by a resolution of the Board of Directors on …(date of resolution)…

Yours faithfully

……………………….

Signature

Name:

Name of Issuer:

Date:

Notes

1 Applicable only in relation to Proposals falling under the Policies and Guidelines on Issue/Offer of Securities. Where an application is being made to the SC for proposals under the assessment approach and exemptions are being sought, to insert the words "except paragraph(s). (refer to paragraph where exemption is being sought).. where exemption(s) is/are being sought as part of the submission to the SC."

2 Applicable only to proposals in relation to public companies.

3 Applicable only to the issue, offer or listing of equity or equity-linked securities by public companies.

4, 5, 6 Applicable only to proposals in relation to listed companies.

* To delete if not applicable

Appendix 3 (b)

Declaration by the Principal Adviser
Date: (Date of Application)
The Chairman
Securities Commission

Dear Sir
ISSUER (Name of Issuer)
Declaration Pursuant to:

- Paragraph 4.01 of the Guidelines on the Offering of Islamic Securities; and
- Paragraph 16.02 of the Policies and Guidelines on Issue/Offer of Securities *

…(Name of Issuer)…. is proposing to undertake the following proposals:

(a) ……….

(b) ……….

(c) ……….

(hereinafter referred to as "the Proposal").

We,..(Name of Principal Adviser)…, are advising ..(Name of Issuer).. on the Proposal.

2. We confirm that after having made all reasonable enquiries, and to the best of our knowledge and belief, there is no false or misleading statement contained in, or material omission from, the information that is provided to the SC in relation to the above Proposal.
3. We declare that we are satisfied after having made all reasonable enquiries that the Proposal is in full compliance with the following:
   (a) The Policies and Guidelines on Issue/Offer of Securities1;
   (b) The Guidelines on the Offering of Islamic Securities;
   (c) The Guidelines on the Offering of Asset-Backed Debt Securities*;
   (d) The requirements of the Controller of Foreign Exchange with respect to the Proposal*; and
   (e) Other requirements under the Securities Commission Act 1993 as may be applicable.
4. We declare the following:-
   (a) The Proposal involves/does not involve any acquisition of substantial foreign assets, in accordance with Chapter 11 of the Policies and Guidelines on Issue/Offer of Securities[2];

(b) The Proposal results/does not result in a significant change in the business direction of the listed company, in accordance with Chapter 12 of the Policies and Guidelines on Issue/Offer of Securities [3];

(c) The Issuer is/is not a distressed listed company, in accordance with Chapter 13 of the Policies and Guidelines on Issue/Offer of Securities[4];

(d) The Proposal is/is not a related-party transaction in accordance with Chapter 10 of the Policies and Guidelines on Issue/Offer of Securities[5];

5. We undertake to immediately inform the SC if it has come to our knowledge that the Issuer has breached or failed to comply with such requirements, after submission of this declaration relating to the Proposal until the implementation of the Proposal.
6. We undertake to provide to the SC all such information as the SC may require in relation to the Proposal.

Yours faithfully

………………………

Signature

Name:

Name of Principal Adviser:

Date:

* To delete if not applicable

Notes

1 Applicable only in relation to Proposals falling under the Policies and Guidelines on Issue/Offer of Securities. Where an application is being made to the SC for proposals under the assessment approach and exemptions are being sought, to insert the words "except paragraph(s)..(refer to paragraph where exemption is being sought)..where exemption(s) is/are being sought as part of the submission to the SC."

2 Applicable only to the issue, offer or listing of equity or equity-linked securities by public companies.

3, 4, 5 Applicable only to proposals in relation to listed companies.

* To delete if not applicable

Appendix IV. Details of Infrastructure Bonds

A. Telecommunications Industry

ISSUER NAME	INDUSTRY	INSTRUMENT TYPE	ISSUE NAME	FIRST BOND ISSUE DATE	FACILITY MATURITY DATE	FACILITY LIMIT (RM mil)	LEAD ARRANGER	CURRENT RATING	CURRENT RATING DATE	FIRST RATING	FIRST RATING DATE
Telekom Malaysia Berhad	Telecommunications network	CP/MTN	Al-Murabahah Medium-Term Notes	18-Jan-2001	18-Jan-2008	700	Aseambankers Malaysia Berhad	AAA	01/08/2006	AAA	15/11/2000
						700					
Celcom (Malaysia) Berhad	Telecommunications network	BONDS	Al-Bai Bithaman Ajil Bond Issuance Facility	15-Apr-2002	15-Apr-2008	1,100	Citibank Berhad	AA1	18/07/2006	A2 (S)	13/03/2002
						1,100					
Sapura Resources Berhad	Telecommunications network	LOANSTOCK		21-Nov-2003	21-Nov-2008	29	AmInvestment Bank Berhad				
Telekom Malaysia Berhad	Telecommunications network	BONDS		30-Dec-2003	28-Dec-2018	4,000	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)				
Tekad Mercu Berhad	Telecommunications network	BONDS	Redeemable Unsecured Bonds	30-Dec-2003	28-Dec-2018	4,000	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AAA (S)	01/08/2006	AAA (S)	11/12/2003
						8,029					
Celcom (Malaysia) Berhad	Telecommunications network	CP	Al-Murabahah Commercial Papers	15-Oct-2004	13-Apr-2007	100	Citibank Berhad	P1	08/09/2005	P2	13/03/2002
						100					
Sarawak Gateway Sdn Berhad	Telecommunications network	BONDS	9 Years Redeemable Secured Serial Sukuk Ijarah	18-Nov-2005	18-Nov-2014	240	RHB Investment Bank Berhad	AAA IS	22/01/2007	AAA IS	14/11/2005
Sacofa Sdn Berhad	Telecommunications network	BONDS	9 Years Sukuk Istisna	18-Nov-2005	18-Nov-2014	160	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AAA IS	22/01/2007	AAA IS	14/11/2005
Touch Matrix Sdn Bhd	Telecommunications network	MTN	Murabahah Islamic Medium-Term Notes Programme	22-Dec-2005	21-Dec-2012	60	KAF Investment Bank Berhad [fka KAF Discounts Berhad]	AA3	08/12/2005	AA3	08/12/2005
						460					
Tele-Flow Capital Sdn Berhad	Telecommunications network	MTN		26-May-2006	26-May-2014	10	Amanah Short Deposits Berhad				
Tele-Flow Capital Sdn Berhad	Telecommunications network	CP/MTN	RM90 million Senior Notes under the MUNIF/IMTN Facility	26-May-2006	24-May-2013	90	Amanah Short Deposits Berhad	AA ID / MARC-1 ID	16/05/2006	AA ID / MARC-1 ID	16/05/2006
Cellular Structures Sdn Berhad	Telecommunications network	MTN	RM184.0 million Senior MUNIF/IMTN	27-Jul-2006	29-Jul-2013	184	Amanah Short Deposits Berhad	AA ID / MARC-1 ID	21/07/2006	AA ID / MARC-1 ID	21/07/2006
Cellular Structures Sdn Berhad	Telecommunications network	MTN		27-Jul-2006	25-Jul-2014	8	Amanah Short Deposits Berhad				
						292					
					TOTAL	**10,681**					

B. Water Industry

ISSUER NAME	INDUSTRY	INSTRUMENT TYPE	ISSUE NAME	FIRST BOND ISSUE DATE	FACILITY MATURITY DATE	FACILITY LIMIT (RM mil)	LEAD ARRANGER	CURRENT RATING	CURRENT_RATING_ACTION	CURRENT RATING DATE	FIRST RATING
SAJ Holdings Sdn Berhad	Water works & supply	BONDS	Al-Bai¿ Bithaman Ajil Serial Bonds	28-Mar-2000	29-Mar-2010	680	Amanah Short Deposits Berhad	A ID	Reaffirm	30/04/2004	A ID
Syarikat Pengeluar Air Sungai Selangor Sdn Bhd	Water works & supply	BONDS	Al-Bai' Bithaman Ajil Islamic Debt Securities	19-Jul-2000	19-Jul-2016	1,407	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AA3	Reaffirm	28/07/2006	AA3 (S)
Puncak Niaga (M) Sdn Berhad	Water works & supply	BONDS	10 Years Al-Bai Bithaman Ajil Serial Bonds	27-Oct-2000	27-Oct-2016	1,020	United Overseas Bank (Malaysia) Berhad	AA ID	Reaffirm	18/12/2006	AA ID
Syarikat Pengeluar Air Sungai Selangor Sdn Bhd	Water works & supply	BONDS	Floating Rate Notes	01-Dec-2000	19-Jul-2006	435	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AA3	Up	19/10/2005	AA3 (S)
						3,542					
Puncak Niaga (M) Sdn Berhad	Water works & supply	BONDS	Junior Notes A ("A Notes")	20-Nov-2001	18-Nov-2016	547	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	A+	Up	18/12/2006	A
						547					
Gas District Cooling (Putrajaya) Sdn Berhad	Water works & supply	BONDS	5 - 20 Years Al-Bai Bithaman Ajil Islamic Debt Securities	04-Dec-2002	02-Dec-2022	300	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AAA ID	Reaffirm	09/02/2007	AAA ID
						300					
Puncak Niaga (M) Sdn Berhad	Water works & supply	CP/MTN	5 Years Murabahah Commercial Paper/ Murabahah Medium-Term	02-Apr-2003	11-Oct-2007	350	United Overseas Bank (Malaysia) Berhad	AA ID / MARC-1 ID	Reaffirm	18/12/2006	AA ID / MARC-1 ID
						350					
Redmax Sdn Bhd	Water works & supply	BONDS	Al-Bai Bithaman Ajil Fixed Rate Secured Bonds	24-Mar-2004	24-Mar-2008	100	KAF Investment Bank Berhad [fka KAF Discounts Berhad]	A1	Initial	06/02/2004	A1

B. Water Industry (cont'd)

ISSUER NAME	INDUSTRY	INSTRUMENT TYPE	ISSUE NAME	FIRST BOND ISSUE DATE	FACILITY MATURITY DATE	FACILITY LIMIT (RM mil)	LEAD ARRANGER	CURRENT RATING	CURRENT_RATING_ACTION	CURRENT RATING DATE	FIRST RATING
Syarikat Mengurus Air Banjir & Terowong Sdn Bhd	INFRASTRUCTURES AND UTILITIES	MTN	Medium-Term Notes	02-Sep-2004	30-Aug-2012	2,055	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AAA (S)	Reaffirm	17/10/2006	AAA (S)
Gas District Cooling (KLIA) Sdn Berhad	Water works & supply	CP/MTN	7 Years Murabahah Commercial Paper/	27-Sep-2004	27-Mar-2006	400	RHB Bank Berhad	AA ID / MARC-1 ID	Affirm	15/10/2004	AA- ID / MARC-1 ID
Jauhari Harapan Sdn Bhd	Water works & supply	BONDS	Serial Bonds	30-Sep-2004	30-Sep-2014	108	AmInvestment Bank Berhad	AA3	Reaffirm	24/11/2006	AA3
SAJ Holdings Sdn Berhad	Water works & supply	BONDS	6 - 15 Years Bai Bithaman Ajil Debt Securities	25-Oct-2004	25-Oct-2019	1,280	Aseambankers Malaysia Berhad	AA- ID	Reaffirm	27/02/2007	AA- ID
						3,943					
Syarikat Bekalan Air Selangor Sdn Berhad	Water works & supply	MTN	Bai Bithaman Ajil Commercial Paper/Medium Terms Note Progr	30-Sep-2005	30-Sep-2025	3,000	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AA- ID / MARC-1 ID	Affirm	20/10/2006	AA- ID / MARC-1 ID
Sweetwater SPV Sdn Berhad	Water works & supply	BONDS	RM195 million Bai Bithaman Ajil Islamic Debt	25-Oct-2005	24-Oct-2014	195	Avenue Securities Sdn Berhad	A+ ID	Affirm	25/01/2007	A+ ID
						3,195					
Titisan Modal (M) Sdn Berhad	Water works & supply	BONDS	6 - 15 years Fixed Rate Serial Bonds	28-Apr-2006	28-Apr-2021	738	Affin Investment Bank Berhad (FKA Affin Merchant Bank Berhad)	AA+ (S)	Rationalised	07/09/2006	A+
Viable Chip (M) Sdn Berhad	Water works & supply	BONDS	Bai' Bithaman Ajil Islamic Debt Securities	30-Aug-2006	29-Aug-2014	150	AmInvestment Bank Berhad	A+ ID	Initial	28/08/2006	A+ ID
Viable Chip (M) Sdn Berhad	Water works & supply	BONDS	Bank Guaranteed Bai' Bithaman Ajil Islamic Debt	30-Aug-2006	30-Aug-2012	50	AmInvestment Bank Berhad	AAA ID (BG)	Initial	28/08/2006	AAA ID (BG)
Syarikat Pengeluar Air Sungai Selangor Sdn Bhd	Water works & supply	CP/MTN	Murabahah Commercial Papers & Medium Term Notes Programme	29-Nov-2006	27-Nov-2026	435	United Overseas Bank (Malaysia) Berhad	AA ID / MARC-1 ID	Initial	24/11/2006	AA ID / MARC-1 ID
Puncak Niaga (M) Sdn Berhad	Water works & supply	BONDS	RM435 Million Nominal Value Redeemable Unsedured Bonds	19-Dec-2006	19-Dec-2016	435	United Overseas Bank (Malaysia) Berhad	A+	Initial	18/12/2006	A+
						1,808					
					TOTAL	**13,685**					

C. Transport

ISSUER NAME	INDUSTRY	INSTRUMENT TYPE	ISSUE NAME	FIRST BOND ISSUE DATE	FACILITY MATURITY DATE	FACILITY LIMIT (RM mil)	LEAD ARRANGER	CURRENT RATING	CURRENT RATING DATE	FIRST RATING	FIRST RATING DATE	RATING AGENCY
K.L. International Airport Berhad	Airports & ports	BONDS		18-Jan-1995	19-Jan-2015	1,600	Bank Negara Malaysia					
Kesas Sdn Bhd	ROADS	LOANSTOCK		31-Mar-1995	19-Aug-2022	625	Aseambankers Malaysia Berhad					
Expressway Lingkaran Tengah Sdn Bhd	Highways & interchanges	BONDS		30-Jun-1995	30-Jun-2005	400	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)					
Expressway Lingkaran Tengah Sdn Bhd	Highways & interchanges	LOANNOTES		30-Jun-1995	30-Jun-2005	440	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)					
						3,065						
K.L. International Airport Berhad	Airports & ports	BONDS		31-Jan-1996	29-Jan-2016	2,200	Bank Islam Malaysia Berhad					
						2,200						
Lekir Bulk Terminal Sdn Bhd	Port Facilities	BONDS	Serial Bonds	07-Jul-2000	06-Jul-2012	445	HSBC Bank Malaysia Berhad	AA1	20/10/2006	AA3 (S)	16/06/2000	RAM
Lingkaran Trans Kota Sdn. Bhd.	Highways & interchanges	BONDS	Guaranteed Serial Bonds	26-Jul-2000	26-Jan-2009	275	Aseambankers Malaysia Berhad	AA2	29/08/2006	A3	18/07/2000	RAM
Penang Bridge Sdn Bhd	Highways & interchanges	BONDS	Al-Bai' Bithaman Ajil Facility	30-Aug-2000	30-Aug-2013	785	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AA2	03/01/2007	AA2	14/08/2000	RAM
						1,505						
Besraya (M) Sdn Bhd	Highways & interchanges	CP/MTN	Medium-Term Notes Programme	19-Mar-2001	29-Feb-2008	180	AmInvestment Bank Berhad	AA3 / P1	27/10/2006	AA3 / P1	09/11/2000	RAM
Sistem Penyuraian Trafik KL Barat Sdn Berhad	Highways & interchanges	BONDS	16 Years Serial Fixed Rate Bonds	31-Jul-2001	31-Jul-2017	365	AmInvestment Bank Berhad	AA-	29/12/2006	A (BG)	15/07/2001	MARC
Sistem Penyuraian Trafik KL Barat Sdn Berhad	Highways & interchanges	BONDS	20 Years Al-Bai Bithaman Ajil Islamic Debt Securities	06-Aug-2001	06-Aug-2021	510	AmInvestment Bank Berhad	A- ID	15/03/2005	A ID	15/07/2001	MARC
Sistem Lingkaran-Lebuhraya Kajang Sdn Bhd	Highways & interchanges	BONDS	20 Years Al-Bai' Bithaman Ajil Islamic Debt Securities	22-Aug-2001	20-Aug-2021	2,010	Deutsche Bank (Malaysia) Berhad	B- ID	20/09/2006	A ID	15/08/2001	MARC
Kuching Port Authority	Airports & ports	BONDS	14 Years Al-Bai Bithaman Ajil Islamic Debt Securities	27-Dec-2001	24-Dec-2015	180	MIDF Amanah Investment Bank Berhad (FKA Utama Merchant Bank Berhad)	AAA ID (S)	09/02/2007	AA+ ID (S)	15/12/2001	MARC
MTD Prime Sdn Berhad	Civil engineering & contracting	BONDS	6 1/2 Years Al-Bai Bithaman Ajil Islamic Debt Securities	31-Jul-2001	31-Jul-2007	250	AmInvestment Bank Berhad	AA ID	05/01/2007	AA- ID	15/07/2001	MARC
						3,495						

C. Transport (cont'd)

ISSUER NAME	INDUSTRY	INSTRUMENT TYPE	ISSUE NAME	FIRST BOND ISSUE DATE	FACILITY MATURITY DATE	FACILITY LIMIT (RM mil)	LEAD ARRANGER	CURRENT RATING	CURRENT RATING DATE	FIRST RATING	FIRST RATING DATE	RATING AGENCY
Projek Lebuhraya Utara-Selatan Berhad	Highways & interchanges	BONDS	Bai' Bithaman Ajil Islamic Debt Securities	31-May-2002	31-May-2017	5,100	RHB Investment Bank Berhad	AAA	10/10/2006	AAA	23/04/2002	RAM
Grand Saga Sdn Bhd	Highways & interchanges	BONDS	Al-Bai' Bithaman Ajil Islamic Debt Securities	20-Sep-2002	20-Sep-2010	210	MIMB Investment Bank Berhad (FKA Malaysian International Merchant Bankers Berhad)	AA3	02/08/2006	AA3	17/09/2002	RAM
Kesas Sdn Bhd	ROADS	BONDS	Al-Bai' Bithaman Ajil Islamic Debt Securities	11-Oct-2002	10-Oct-2014	800	MIMB Investment Bank Berhad (FKA Malaysian International Merchant Bankers Berhad)	AA3	18/10/2006	AA3	25/09/2002	RAM
Lingkaran Trans Kota Sdn. Bhd.	Highways & interchanges	BONDS	Al-Bai' Bithaman Ajil Islamic Debt Securities	23-Oct-2002	23-Oct-2014	395	United Overseas Bank (Malaysia) Berhad	AA2	29/08/2006	AA3	03/10/2002	RAM
Lingkaran Trans Kota Sdn. Bhd.	Highways & interchanges	BONDS	Al-Bai' Bithaman Ajil Islamic Debt Securities	23-Oct-2002	23-Oct-2014	148	United Overseas Bank (Malaysia) Berhad	AA3	29/08/2006	A1	03/10/2002	RAM
Projek Lebuhraya Utara-Selatan Berhad	Highways & interchanges	BONDS	Bai' Bithaman Ajil Islamic Debt Securities	20-Dec-2002	20-Dec-2016	2,260	RHB Investment Bank Berhad	AAA	10/10/2006	AAA	09/12/2002	RAM
						8,913						
Kelang Multi Terminal Sdn Berhad	Airports & ports	BONDS	7 Years Floating Rate Notes	28-Feb-2003	26-Feb-2010	350	Southern Investment Bank Berhad	AA	02/08/2006	A+	15/08/2002	MARC
Expressway Lingkaran Tengah Sdn Bhd	Highways & interchanges	BONDS	Al-Bai' Bithaman Ajil Islamic Debt Securities	28-Feb-2003	27-Feb-2015	800	Amanah Short Deposits Berhad	AA2	27/04/2006	AA3	15/01/2003	RAM
K.L. International Airport Berhad	Airports & ports	BONDS	Bai' Bithaman Ajil Notes Issuance Facility	30-Jun-2003	30-Jun-2015	4,060	AmInvestment Bank Berhad	AAA (S)	02/02/2007	AAA (S)	26/06/2003	RAM
New Pantai Expressway Sdn Bhd	Highways & interchanges	BONDS	Junior Bai Bithaman Ajil Islamic Debt Securities	27-Oct-2003	27-Oct-2016	250	AmInvestment Bank Berhad	A1 (S)	27/10/2006	A1 (S)	13/10/2003	RAM
New Pantai Expressway Sdn Bhd	Highways & interchanges	BONDS	Senior Bai Bithaman Ajil Islamic Debt Securities	31-Oct-2003	31-Oct-2013	490	AmInvestment Bank Berhad	AA3	27/10/2006	AA3	13/10/2003	RAM
						5,950						
Lingkaran Trans Kota Sdn. Bhd.	Highways & interchanges	BONDS	Redeemable Junior Bonds	15-Mar-2004	15-Mar-2017	174	United Overseas Bank (Malaysia) Berhad	AA3	29/08/2006	A1	27/02/2004	RAM
Selia Selenggara Selatan Sdn Bhd	ROADS	BONDS	Senior Secured Serial Bonds	31-Mar-2004	31-Mar-2014	170	Aseambankers Malaysia Berhad	AA3	24/01/2007	AA3	22/03/2004	RAM
Selia Selenggara Selatan Sdn Bhd	ROADS	BONDS	Junior Secured Serial Notes B	31-Mar-2004	31-Mar-2014	22	Aseambankers Malaysia Berhad	C1	24/01/2007	C1	22/03/2004	RAM
Selia Selenggara Selatan Sdn Bhd	ROADS	BONDS	Junior Secured Serial Notes C	31-Mar-2004	31-Mar-2014	124	Aseambankers Malaysia Berhad	C3	24/01/2007	C3	22/03/2004	RAM
Kesas Sdn Bhd	ROADS	CP/MTN	MUNIF/Islamic Medium-Term Notes Facility	08-Oct-2004	11-Oct-2006	100	MIMB Investment Bank Berhad (FKA Malaysian International Merchant Bankers Berhad)	AA3 / P1	18/10/2005	AA3 / P1	25/09/2002	RAM
Penang Port Sdn Bhd	Shipyards & Ports	CP/MTN	Commercial Papers/Medium Term Notes	11-Oct-2004	26-Sep-2005	80	ABN Amro Bank Berhad	A2 / P1	12/10/2004	A2 / P1	16/09/2000	RAM

C. Transport (cont'd)

ISSUER NAME	INDUSTRY	INSTRUMENT TYPE	ISSUE NAME	FIRST BOND ISSUE DATE	FACILITY MATURITY DATE	FACILITY LIMIT (RM mil)	LEAD ARRANGER	CURRENT RATING	CURRENT RATING DATE	FIRST RATING	FIRST RATING DATE	RATING AGENCY
Lingkaran Trans Kota Sdn. Bhd.	Highways & interchanges	CP/MTN	Murabahah Medium-Term Notes Programme	15-Oct-2004	23-Oct-2009	255	United Overseas Bank (Malaysia) Berhad	AA3 / P1	29/08/2006	A1 / P1	03/10/2002	RAM
Sistem Penyuraian Trafik KL Barat Sdn Berhad	Highways & interchanges	CP	7 Years Revolving Underwritten Facility - Convertible into a Floating Rate Term Loan	18-Oct-2004	23-Jul-2008	125	AmInvestment Bank Berhad	MARC-1	29/12/2006	MARC-2	15/07/2001	MARC
Projek Lintasan Kota Sdn Berhad	Highways & interchanges	CP		03-Dec-2004	05-Feb-2007	60	Alliance Investment Bank Berhad (FKA Alliance Merchant Bank Berhad)					
Lumut Maritime Terminal Sdn Bhd	PORTS	BONDS	Bai' Bithaman Ajil Islamic Debt Securities	03-Dec-2004	02-Jun-2017	60	AmInvestment Bank Berhad	AA3 (S)	20/10/2006	AA3 (S)	24/11/2004	RAM
						1,170						
Besraya (M) Sdn Bhd	Highways & interchanges	CP/MTN	CP/MTN	14-Feb-2005	05-Jan-2012	100	AmInvestment Bank Berhad	AA3 / P1	27/10/2006	AA3 / P1	15/12/2004	RAM
Projek Lebuhraya Utara-Selatan Berhad	Highways & interchanges	BONDS	Sukuk Musyarakah Series 2	17-Jun-2005	17-Jun-2019	2,410	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AAA	10/10/2006	AAA	08/06/2005	RAM
Konsortium Lebuhraya Butterworth-Kulim (KLBK) Sdn	ROADS	BONDS	Secured Bai' Bithaman Ajil Islamic Debt Securities	15-Jul-2005	15-Jul-2022	247	Bank Muamalat Malaysia Berhad	AA3	14/07/2006	AA3	14/07/2005	RAM
Konsortium Lapangan Terjaya Sdn Berhad	Highways & interchanges	MTN	RM380 MILLION AL-BAI BITHAMAN AJIL MEDIUM TERM NOTES (¿BBA M	28-Jul-2005	28-Jul-2020	380	United Overseas Bank (Malaysia) Berhad	A+ ID	06/07/2006	A+ ID	14/07/2005	MARC
Konsortium Lebuhraya Utara-Timur (KL) Sdn Berhad	Highways & interchanges	BONDS	Redeemable Secured Serial Bonds under an Islamic Istisna Sukuk	18-Oct-2005	18-Oct-2018	780	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	A+ ID	22/06/2006	A+ ID	04/10/2005	MARC
Senai Desaru Expressway Berhad	Highways & interchanges	BONDS	Bai' Bithaman Ajil Islamic Debt Securities	09-Dec-2005	07-Jun-2024	1,460	Aseambankers Malaysia Berhad	AA3	29/11/2006	AA3	15/09/2005	RAM
Senai Desaru Expressway Berhad	Highways & interchanges	BONDS		16-Dec-2005	16-Dec-2038	965	Aseambankers Malaysia Berhad					
Sistem Penyuraian Trafik KL Barat Sdn Berhad	Highways & interchanges	BONDS	Al-Bai Bithaman Ajil Islamic Facility (Restructured BaIDS)	29-Dec-2005	29-Dec-2020	510	United Overseas Bank (Malaysia) Berhad	AA- ID	29/12/2006	AA- ID	29/12/2005	MARC
SDE Land Sdn Bhd	Roads and Interchanges	CP/MTN	CP/MTN	17-Oct-2005	19-Aug-2010	401	Standard Chartered Bank Malaysia Berhad	AAA / P1	29/11/2006	AAA / P1	13/10/2005	RAM
						7,253						
Penang Port Sdn Bhd	Shipyards & Ports	CP/MTN	Islamic Commercial Papers/Medium Term Notes	24-Feb-2006	25-Feb-2013	100	Affin Investment Bank Berhad (FKA Affin Merchant Bank Berhad)	AA3 / P1	16/02/2007	A2 / P1	12/10/2004	RAM
Penang Bridge Sdn Bhd	Highways & interchanges	BONDS	Redeemable Zero Coupon Serial Sukuk Istisna	31-Mar-2006	29-Mar-2019	695	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AA2	03/01/2007	AA2	24/03/2006	RAM
Konsortium Lapangan Terjaya Sdn Berhad	Highways & interchanges	CP/MTN	RM80 million MCP/MTN (¿collectively known as Finance Facilit	16-May-2006	22-Jun-2012	80	United Overseas Bank (Malaysia) Berhad	A+ ID / MARC-2 ID	06/07/2006	A+ ID / MARC-2 ID	14/07/2005	MARC
Zecon Toll Concessionaire Sdn Berhad	ROADS	BONDS	RM60 million Bai-Bithaman Ajil Islamic Debt Securities	14-Jul-2006	14-Jul-2021	60	Affin Investment Bank Berhad (FKA Affin Merchant Bank Berhad)	A+ ID	22/06/2006	A+ ID	22/06/2006	MARC
Projek Lebuhraya Utara-Selatan Berhad	Highways & interchanges	MTN	Sukuk Musyarakah Medium Term Notes Programme	10-Oct-2006	10-Oct-2031	4,500	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AAA	10/10/2006	AAA	10/10/2006	RAM
						5,435						
					TOTAL	**38,986**						

D. Power

ISSUER NAME	INDUSTRY	INSTRUMENT TYPE	ISSUE NAME	FIRST BOND ISSUE DATE	FACILITY MATURITY DATE	FACILITY LIMIT (RM mil)	LEAD ARRANGER	CURRENT RATING	CURRENT RATING DATE	FIRST RATING	FIRST RATING DATE	RATING AGENCY
YTL Power Generation Sdn Bhd	Power plants	BONDS	Fixed Rate Facility	30-Oct-1993	30-Oct-2008	1,500		AA1	12/01/2007	AA3	01/11/1993	RAM
Port Dickson Power Berhad	Power plants	LOANSTOCK		16-Dec-1993	09-Dec-2024	150						
						1,650						
Segari Energy Ventures Sdn Bhd	Power plants	LOANNOTES		12-Apr-1994	30-Jun-2009	761						
Segari Energy Ventures Sdn Bhd	Power plants	BONDS	Fixed Rate Facility	13-Apr-1994	30-Jun-2009	1,500	Aseambankers Malaysia Berhad	AA1	24/02/2006	AA3	12/04/1994	RAM
						2,261						
Syarikat SESCO Berhad	UTILITIES	BONDS		17-May-1996	15-Jul-2011	250	Aseambankers Malaysia Berhad					
						250						
Segari Energy Ventures Sdn Bhd	Power plants	BONDS		31-Mar-1997	31-Mar-2005	522	Aseambankers Malaysia Berhad	AA1	15/03/2005	AA1	15/03/2005	RAM
Segari Energy Ventures Sdn Bhd	Power plants	BONDS	Conventional Fixed Rate Bonds	31-Mar-1997	31-Mar-2009	708	Aseambankers Malaysia Berhad	AA1	24/02/2006	AA2	28/02/1997	RAM
Tenaga Nasional Berhad	UTILITIES	BONDS	9 - 11 Years Al-Bai Bithaman Ajil Notes Issuance Facility	01-Oct-1997	01-Oct-2012	1,000	KAF Investment Bank Berhad [fka KAF Discounts Berhad]	AA+ ID / MARC-1 ID	26/02/2007	AAA ID / MARC-1 ID	15/10/1997	MARC
						2,230						

D. Power (cont'd)

ISSUER NAME	INDUSTRY	INSTRUMENT TYPE	ISSUE NAME	FIRST BOND ISSUE DATE	FACILITY MATURITY DATE	FACILITY LIMIT (RM mil)	LEAD ARRANGER	CURRENT RATING	CURRENT RATING DATE	FIRST RATING	FIRST RATING DATE	RATING AGENCY
Ranhill Powertron Sdn Bhd	Power plants	LOANSTOCK		30-Jun-1998	30-Jun-2008	29	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)					
Tenaga Nasional Berhad	UTILITIES	BONDS	8 Years Fixed-Rate Unsecured Bonds (Issue II)	29-Dec-1998	29-Dec-2006	500	HSBC Bank Malaysia Berhad	AA+	26/05/2006	AA	15/12/1998	MARC
						529						
YTL Power International Bhd	Power plants	BONDS	Redeemable Unsecured Bonds	11-Jan-2000	11-Jan-2007	750	Deutsche Bank (Malaysia) Berhad	AA1	19/04/2006	AA1	29/10/1999	RAM
Sandakan Power Corporation Sdn Bhd	Power plants	BONDS	Fixed Rate Serial Bonds	07-Aug-2000	07-Aug-2007	65	OCBC Bank (Malaysia) Berhad	AA3	20/12/2006	AA3	13/07/2000	RAM
Serudong Power Sdn Bhd	Power plants	BONDS	Fixed Rate Serial Bonds	11-Sep-2000	10-Sep-2010	75	Alliance Investment Bank Berhad (FKA Alliance Merchant Bank Berhad)	AA2	13/02/2007	AA3	08/09/2000	RAM
ARL Tenaga Sdn Berhad	Power plants	BONDS	10 Years Al-Bai Bithaman Ajil Islamic Debt Securities	21-Sep-2000	21-Sep-2010	177	Amanah Short Deposits Berhad	A+ ID	28/12/2006	A ID	15/05/2000	MARC
Stratavest Sdn Bhd	Power plants	BONDS	Al-Bai' Bithaman Ajil Serial Bonds	27-Sep-2000	27-Sep-2010	197	Alliance Investment Bank Berhad (FKA Alliance Merchant Bank Berhad)	A3	30/11/2006	AA3	27/09/2000	RAM
Sarawak Power Generation Sdn Bhd	Power plants	BONDS	Al-Bai' Bithaman Ajil Islamic Debt Securities	15-Dec-2000	15-Dec-2006	160	MIDF Amanah Investment Bank Berhad (FKA Utama Merchant Bank Berhad)	AA1	27/07/2006	AA1	06/11/2000	RAM
Sejingkat Power Corporation Sdn Bhd	Power plants	BONDS	Al-Bai' Bithaman Ajil Islamic Debt Securities	15-Dec-2000	15-Dec-2009	195	MIDF Amanah Investment Bank Berhad (FKA Utama Merchant Bank Berhad)	AA2	25/08/2006	AA2	07/11/2000	RAM
						1,619						

D. Power (cont'd)

ISSUER NAME	INDUSTRY	INSTRUMENT TYPE	ISSUE NAME	FIRST BOND ISSUE DATE	FACILITY MATURITY DATE	FACILITY LIMIT (RM mil)	LEAD ARRANGER	CURRENT RATING	CURRENT RATING DATE	FIRST RATING	FIRST RATING DATE	RATING AGENCY
Prai Power Sdn Bhd	Power plants	BONDS	Al-Istisna Fixed Rate Serial Bonds	26-Feb-2001	26-Feb-2016	780	KAF Investment Bank Berhad [fka KAF Discounts Berhad]	AA3	22/03/2006	AA3	19/02/2001	RAM
Tenaga Nasional Berhad	UTILITIES	CP/MTN	Combined Murabahah Underwritten Notes Issu. Fac'ty & MTN	05-Mar-2001	09-Nov-2007	400	KAF Investment Bank Berhad [fka KAF Discounts Berhad]	AA1 / P1	15/05/2006	AA1 / P1	16/11/2000	RAM
Tenaga Nasional Berhad	UTILITIES	BONDS	Al-Bai Bithaman Ajil Notes Issuance Facility	30-Mar-2001	28-Mar-2008	1,000	AmInvestment Bank Berhad	AA1	15/05/2006	AA1	02/04/2001	RAM
Malakoff Berhad	Power plants	CP/MTN	Commercial Papers	13-Apr-2001	11-Apr-2008	420	Citibank Berhad	AA1 (S) / P1	28/07/2006	AA1 (S) / P1	19/02/2001	RAM
Syarikat SESCO Berhad	UTILITIES	BONDS	Al-Bai' Bithaman Ajil Islamic Debt Securities	29-Jun-2001	29-Jun-2012	605	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AAA	13/07/2006	AA1	14/05/2001	RAM
Tenaga Nasional Berhad	UTILITIES	BONDS	Repackaged Tenaga Income Securities	16-Aug-2001	19-Sep-2011	1,500	RHB Investment Bank Berhad	AA1 (S)	15/05/2006	AA1 (S)	08/08/2001	RAM
Powertek Berhad	Power plants	BONDS	Redeemable Unsecured Bonds	30-Aug-2001	30-Aug-2011	350	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AA1	30/10/2006	AA1	14/08/2001	RAM
Teknologi Tenaga Perlis Consortium Sdn Bhd	Power plants	BONDS	Al-Istisna Fixed Rate Serial Bonds	13-Sep-2001	13-Sep-2016	1,515	RHB Bank Berhad	AA3	08/08/2006	AA3	30/08/2001	RAM
Tenaga Nasional Berhad	UTILITIES	BONDS	20 years Al-Bai Bithaman Ajil Bonds	13-Dec-2001	13-Dec-2021	2,000	Aseambankers Malaysia Berhad	AA+ ID	26/02/2007	AA+ ID	15/12/2001	MARC
GB3 Sdn Bhd	Power plants	BONDS	Senior Secured Al-Bai Bithaman Ajil Bond Facility	20-Dec-2001	19-Dec-2014	850	Aseambankers Malaysia Berhad	AA2	18/01/2007	AA2 (S)	12/09/2001	RAM
						9,420						

D. Power (cont'd)

ISSUER NAME	INDUSTRY	INSTRUMENT TYPE	ISSUE NAME	FIRST BOND ISSUE DATE	FACILITY MATURITY DATE	FACILITY LIMIT (RM mil)	LEAD ARRANGER	CURRENT RATING	CURRENT RATING DATE	FIRST RATING	FIRST RATING DATE	RATING AGENCY
Musteq Hydro Sdn Bhd	Power plants	BONDS	Al-Bai' Bithaman Ajil Fixed Rate Serial Bonds	30-Jan-2002	30-Jan-2017	108	Aseambankers Malaysia Berhad	A2	03/01/2007	A2	03/12/2001	RAM
Pahlawan Power Sdn Bhd	Power plants	BONDS	Al-Bai' Bithaman Ajil Islamic Debt Securities	31-Jan-2002	31-Jan-2012	450	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AA1	27/10/2006	AA1	18/01/2002	RAM
GB3 Sdn Bhd	Power plants	LOANSTOCK		22-Feb-2002	22-Feb-2023	287	Aseambankers Malaysia Berhad					
Pahlawan Power Sdn Bhd	Power plants	CP/MTN	Al-Murabahah Medium-Term Notes/Commerial Papers	24-Sep-2002	21-Jan-2009	100	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AA1 / P1	27/10/2006	AA1 / P1	18/01/2002	RAM
						945						

D. Power (cont'd)

ISSUER NAME	INDUSTRY	INSTRUMENT TYPE	ISSUE NAME	FIRST BOND ISSUE DATE	FACILITY MATURITY DATE	FACILITY LIMIT (RM mil)	LEAD ARRANGER	CURRENT RATING	CURRENT RATING DATE	FIRST RATING	FIRST RATING DATE	RATING AGENCY
Panglima Power Sdn Bhd	Power plants	BONDS	Redeemable Secured Serial Bonds	07-Mar-2003	06-Sep-2013	500	AmInvestment Bank Berhad	AA2	02/10/2006	AA2 (S)	17/01/2003	RAM
Panglima Power Sdn Bhd	Power plants	BONDS	Redeemable Secured Serial Bonds	19-Mar-2003	18-Mar-2016	330	AmInvestment Bank Berhad	AA2	02/10/2006	AA2 (S)	17/01/2003	RAM
YTL Power Generation Sdn Bhd	Power plants	MTN	Medium-Term Notes Programme	15-Jul-2003	15-Jul-2014	1,300	Aseambankers Malaysia Berhad	AA1	12/01/2007	AA1	10/07/2003	RAM
Magna Segmen Sdn Bhd	UTILITIES	BONDS	Fixed Rate Serial Bonds	07-Oct-2003	06-Oct-2017	45	Aseambankers Malaysia Berhad	AA3	07/06/2005	AA3	07/10/2003	RAM
Malakoff Berhad	Power plants	BONDS	Serial Bonds	28-Oct-2003	28-Oct-2013	1,850	Deutsche Bank (Malaysia) Berhad	AA2	28/07/2006	AA2	16/10/2003	RAM
Tanjung Bin Power Sdn Bhd	Power plants	MTN	Istisna Medium-Term Notes Programme	11-Nov-2003	14-May-2018	5,570	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)	AA3	19/01/2007	AA3	20/10/2003	RAM
Tanjung Bin Power Sdn Bhd	Power plants	LOANSTOCK		11-Nov-2003	29-Aug-2031	1,400	CIMB Investment Bank Berhad (fka Commerce International Merchant Bankers)					
						10,995						

D. Power (cont'd)

ISSUER NAME	INDUSTRY	INSTRUMENT TYPE	ISSUE NAME	FIRST BOND ISSUE DATE	FACILITY MATURITY DATE	FACILITY LIMIT (RM mil)	LEAD ARRANGER	CURRENT RATING	CURRENT RATING DATE	FIRST RATING	FIRST RATING DATE	RATING AGENCY
Kapar Energy Ventures Sdn Berhad	Power plants	BONDS	15 Years Bai Bithamin Ajil Islamic Debt Securities	08-Jul-2004	08-Jul-2019	3,402	Bank Muamalat Malaysia Berhad	AA+ ID	31/10/2006	AA+ ID	15/06/2004	MARC
ARL Tenaga Sdn Berhad	Power plants	MTN	7 Years Islamic Medium-Term Notes	08-Jul-2004	08-Jul-2014	50	Amanah Short Deposits Berhad	A+ ID	28/12/2006	A ID	15/05/2004	MARC
GB3 Sdn Bhd	Power plants	CP/MTN	Al-Murabahah Medium-Term Notes Facility	24-Aug-2004	20-Feb-2009	350	Aseambankers Malaysia Berhad	AA2 / P1	18/01/2007	AA2 (S) / P1	12/09/2001	RAM
Magna Segmen Sdn Bhd	UTILITIES	CP	Commercial Papers Programme	07-Oct-2004	07-Oct-2010	25	Aseambankers Malaysia Berhad	P1	07/06/2005	P1	07/10/2003	RAM
Tenaga Nasional Berhad	UTILITIES	CP	Islamic Revolving Underwritten Facility	30-Nov-2004	18-Aug-2006	600	AmInvestment Bank Berhad	P1	15/05/2006	P1	20/08/1996	RAM
						4,427						

D. Power (cont'd)

ISSUER NAME	INDUSTRY	INSTRUMENT TYPE	ISSUE NAME	FIRST BOND ISSUE DATE	FACILITY MATURITY DATE	FACILITY LIMIT (RM mil)	LEAD ARRANGER	CURRENT RATING	CURRENT RATING DATE	FIRST RATING	FIRST RATING DATE	RATING AGENCY
Special Power Vehicle Berhad	Power plants	MTN	Class B Islamic Medium-Term Notes Facility	05-May-2005	05-May-2034	205	MIMB Investment Bank Berhad (FKA Malaysian International Merchant Bankers Berhad)	C1 (S)	09/06/2006	C1 (S)	22/04/2005	RAM
Jimah Energy Ventures Sdn Bhd	Power plants	MTN	Senior Islamic Medium-Term Notes Facility	12-May-2005	05-May-2025	4,847	AmInvestment Bank Berhad	AA3 (S)	09/06/2006	AA3 (S)	22/04/2005	RAM
Special Power Vehicle Berhad	Power plants	MTN	Class A Islamic Medium-Term Notes Facility	19-May-2005	19-May-2022	797	MIMB Investment Bank Berhad (FKA Malaysian International Merchant Bankers Berhad)	A1 (S)	09/06/2006	A1 (S)	22/04/2005	RAM
Ranhill Powertron Sdn Bhd	Power plants	MTN	Islamic Medium-Term Notes Programme	27-Jun-2005	27-Jun-2019	540	Aseambankers Malaysia Berhad	AA3	09/11/2006	AA3	15/06/2005	RAM
Tenaga Nasional Berhad	UTILITIES	MTN	USD500 million equivalent Murabahah Medium Term Notes Programme	20-Dec-2005	13-Oct-2025	1,900	United Overseas Bank (Malaysia) Berhad	AA1	15/05/2006	AA1	13/10/2005	RAM
						8,289						

D. Power (cont'd)

ISSUER NAME	INDUSTRY	INSTRUMENT TYPE	ISSUE NAME	FIRST BOND ISSUE DATE	FACILITY MATURITY DATE	FACILITY LIMIT (RM mil)	LEAD ARRANGER	CURRENT RATING	CURRENT RATING DATE	FIRST RATING	FIRST RATING DATE	RATING AGENCY
Panglima Power Sdn Bhd	Power plants	CP/MTN	Commercial Papers	27-Feb-2006	20-Jan-2010	306	AmInvestment Bank Berhad	AA2 / P1	02/10/2006	AA2 (S) / P1	17/01/2003	RAM
Segari Energy Ventures Sdn Bhd	Power plants	BONDS	Sukuk Ijarah Bonds	11-May-2006	11-May-2012	930	Aseambankers Malaysia Berhad	AA1	03/05/2006	AA1	03/05/2006	RAM
Sarawak Power Generation Sdn Bhd	Power plants	MTN	Serial Sukuk Musyarakah	26-Dec-2006	24-Dec-2021	215	RHB Asset Management Sdn Berhad	AA1	27/07/2006	AA1	27/07/2006	RAM
Mukah Power Generation Sdn Bhd	Power plants	MTN	Senior Sukuk Programme	27-Dec-2006	27-Dec-2021	665	RHB Asset Management Sdn Berhad	AA3	07/11/2006	AA3	02/10/2006	RAM
Mukah Power Generation Sdn Bhd	Power plants	MTN	Junior Sukuk Programme	27-Dec-2006	27-Dec-2028	285	RHB Asset Management Sdn Berhad	A2	07/11/2006	A2	07/11/2006	RAM
						2,401						
					TOTAL	**45,016**						

JAPAN BANK FOR INTERNATIONAL COOPERATION (JBIC)

http://www.jbic.go.jp/

4-1, Ohtemachi 1-Chome Chiyoda-ku, Tokyo 100-8144, Japan
Tel:+81-3-5218-9720 (JBIC Institute),
Fax: +81-3-5218-9846

Osaka Branch
13th Fl., Aqua Dojima East 4-4, Dojimahama 1-Chome Kita-ku, Osaka 530-0004, Japan
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