Asian Strategy & Leadership Institute
Dedicated To Creating A Better Society

"Integrating the Public Transport Network"

15 October 2009 * Prince Hotel & Residence, Kuala Lumpur

Summary of Proceedings

Welcome Remarks
Dato' Dr Michael Yeoh, Chief Executive Officer/Director, Asian Strategy and Leadership Institute

In his address, Dr Michael said that he hoped the summit would be a timely meeting of both public and private sector figures/bodies to discuss the woes of Malaysia's public transportation system that needs to be urgently addressed. No other part of the country faces such a serious public transport challenge than that of Kuala Lumpur and the surrounding Klang Valley where efficient and timely public transportation is sorely lacking.

In the first National Summit on Urban Public Transport held last year, the country's Minister of Transport, Dato Sri Ong Tee Keat had spoken of the government's plans to improve public transportation in the country. This gives this year's summit such relevance as to assessing what has transpired from last year's summit and what needs to be done. ASLI hopes to continue organising this summit in order to continuously provide the necessary feedback to the government to address this ongoing issue.

Keynote Address: Towards an Efficient and Integrated Public Transport Network
YB Dato' Sri Ong Tee Keat
Read by: YBhg Dato' Long See Wool, Deputy Secretary General (Planning), Ministry of Transport

Dato' Long extended apologies from the Minister of Transport who was unable to be at the summit. The Minister's speech was then read by Dato' Long.

The Minister's speech stated that the government is acutely aware of the serious short comings of the country's public transportation system. He mentioned for example, that only 16% of residents in the Klang Valley use public transportation where as the majority uses personal transportation. This is due to the fact that the ratio of rail track to population size is just 19km per a million of population, that covers only certain parts of Klang Valley. Klang Valley's three existing rail systems and stage buses are already overcrowded with 260,000 commuters during morning rush hour.

The speech pointed out that the government is taking steps to alleviate the issue. For example, a special task force headed by the Ministry of Transport has already been set up to make the Klang Valley public transportation system more attractive. The taskforce's goal is to increase the number of users from 16% to 25% by 2012. Urban areas with high population density such as Penang and Johor Bahru are also being targeted with a similar drive but with yet-to-be-mentioned timeframes. The government's goal is to

create a world class public transportation system through enhancing its service, capacity, coverage and connectivity. Special emphasise will be given to rail transportation as the backbone to planned improvement of urban public transportation. Initial moves by the government is already underway with the planned purchase of 10 sets of electric multiple units (EMU) for Keretapi Tanah Melayu and 10 new trains for Kelana Jaya's Light Rail Transport (LRT) line. The existing LRT lines will also be extended to 32km of track per million of population by 2012. Outside of the Klang Valley, certain segments of the ongoing electric double tracking project for KTM are nearing completion.

Session 1: Towards an Integrated Regulatory Approach
Mr Steven Furst, Senior Associate, Booz & Company

Regulatory fragmentation has been frequently indentified as the root cause for Malaysia's public transportation system woes. Institutional inefficiencies, lack of integration and absence of key functions are the three identified areas of regulatory fragmentation in governance that normally leads to such woes. The result will normally leave a country or city with a myriad of problems such as underdeveloped public transportation, high pollution levels, congestion issues and low safety levels.

Mr Furst cited examples of 6 densely populated cities i.e. London, Singapore, Paris, Hong Kong, Auckland and Berlin as places to learn from because of their quality reputation in transportation governance. In applying a comprehensive transport governance framework (policy, planning & regulation, operations and enforcement) to the transport authorities of the six cities, six valuable lessons were learnt. These consisted of:

- **Separation of regulation from operations**

Regulatory and operations functions are separate with the planning/regulating body having no interest in the ongoing operations. Such operations could be performed by either public or private sector operators with the infrastructure and rolling stock being owned by the regulating body.

- **Planning integration**

All planning and regulatory functions for all public transport modes that are undertaken by one organisation that facilitates integration. It was discovered that intermodal integration is ensured at three levels which are; capacity & route planning, infrastructure planning and fare planning. Transport planning is also highly integrated with urban development.

- **Functions-based structure**

The transport authority adopts a function-based organisational structure to ensure integrated planning across all modes of public transport and to have a direct link with the public transport operators.

- **Budgeting and funding**

Authority is typically responsible for collecting subsidies from government and allocating them to the public transport operators. The allocation is a key in managing the sector and ensuring coordination/ integration. In some cases, funds are allocated by the transport authority to the local authorities for infrastructure projects like roads.

- **Active monitoring**

The performance of public transport operators are monitored and evaluated against defined KPIs covering operations and environmental areas. The service contracts provides sanctions, including termination, in cases of non compliance.

- **Industry consolidation**

The private sector would be consolidation into cohesive organisations that are generally done by the authorities. This move is to ensure effective regulation and to scale up investments which otherwise might be difficult to source from individuals and small operators.

According to Mr Furst, **key roles** and **responsibilities** of an urban transport authority should entail; *budgeting and funding, integrated transport planning, standards development, fares definition and economic regulation, tendering and licensing, performance monitoring, standards enforcement, infrastructure ownership and management, ticketing and fares collection and traffic management*.

What Applies to Malaysia? Three areas for consideration:

- Is there a need for an integrated Transport Authority to regulate and manage the urban transport sector in the major agglomerations?
- Are urban public transport service offerings developed based on an integrated urban and transport planning approach? Are urban transport services closely integrated to provide a seamless service proposition?
- Is the performance management of the service providers / operators consistent, transparent and comprehensive? What sanctions are appropriate for non-performing operators?

Q&A Session:

Q: In establishing the urban transport authority model that Booz & Co. had suggested, would such an entity be an independent body or answerable to any certain sector of the government?

A: In the initial phase, the authority model would be assigned and answerable to a governmental body. However, once that authority progressively proves to be capable of managing its key roles and responsibilities well, the idea would be to give that body substantial independence to work on its own.

Q: While this session concentrates on how to make urban public transport in this country more efficient, what about educating the public (as potential users) on using such transportation? Granted, London and Berlin have reached an impressive level in transportation governance but KL is still developing its urban public transport. How would we benefit from knowing what we know from these two cities?

A: With regards to user involvement, both public and private operators can work hand in hand with user groups and civil societies in order to outreach to the general public regarding the services offered.

Malaysia has the opportunity to learn from the more matured urban public transportation systems in cities like London and Berlin without it having to repeat similar trials and errors.

Q: In the best practices that you have seen in other countries, is the regulating body positioned on a national, state or city level? How would you apply to Malaysia?

A: As with many urban sprawls, many seem to overlap the boundaries between city and state authorities, so there is a need to integrated all the relevant bodies under one umbrella authority in order to iron out issues that will get in the way of providing a good urban public transportation system.

Session 2: A Unified and Seamless Public Transport Network

- **Session Overview by Chairperson**
  Prof. Dr. Ahmad Farhan Mohd Sadullah, Director General, Malaysian Institute of Road Safety Research

When discussing the issue of public transportation (urban, suburban, etc), he said that the topic will always encapsulate the various modes of transportation that are either public or privately owned. When making comparisons between the two that provide almost similar services, the latter has always been considered as having the advantage by providing for example; door to door travel. In his view, in order for the public transportation services (particularly in urban areas) to gain the trust of the public, a seamless and integrated public transport network must be made available. To be 'seamless' is to provide almost door to door travel while being 'integrated' involves both tangible (such as planning) and intangible (such as sustainability) matters.

- **Session Panelist 1**
  Ar. Goh Hock Guan, Chairman, Akitek Jururancang (Malaysia) Sdn Bhd

The question of Malaysia's public transportation system must be viewed as a matter of considerable urgency that needs to be addressed as soon as possible. As the country strengthens economically, its prosperity and population grows as well thus increasing the number of privately owned modes of transportation i.e. motorcycle, car, van, etc. Today's traffic congestion (particularly in urban areas) is only temporarily alleviated by otherwise ad hoc and uncoordinated transportation centric projects (like highways) undertaken by various private and public bodies.

In the meantime, the nation's public transportation system bears the brunt of these projects that give would be users limited choices. He emphasized that the development of land especially in urban areas like KL must take into consideration the convenience of the general public. This is done by developing a 'humane' city where commuters of a seamless and integrated public transport network are given priority (instead of private vehicle users) in getting to their destinations without much difficulty.

- **Session Panelist 2**
  Dr. Dahlia bt. Rosly, Director, Federal Department of Town and Country Planning, Peninsular Malaysia

When touching on the inter relationship between land use and public transport, both aspects do complement each other. Public transport planning must not be done in isolation and should be highly integrated with land use planning/urban development. This is due to the fact that high population density has a direct impact on the capacity of the public transport network. Developing public transport in national strategies goes as far back as 1975 with the recent Ninth Malaysia Plan requiring *an integrated and efficient public transport system* as part of promoting sustainable human settlement development.

Another example is the Principles of National Physical Plan (NPP) where it favours public transport over private vehicle use for inter-urban and intra-city movement. She had also mentioned that a land use planning tool called the Transit Oriented Development (TOD) is used for a mixed-use residential or commercial area designed to maximise access to public transport. This would entail public transport being located in the centre of a relatively high-density development area with progressively lower-density development spreading outwards from it. With regards to the ongoing land use in KL, TOD proposals are always included in its potential development. She said that State Structure Plans (SP) and District Local Plans (LP) also include the need for public transport.

From her point of view, there is a need to address certain matters in order to achieve the goal of a seamless and integrated public transport network:
- A lack of clear ownership (as regulations and operations have different owners)
- The need for an Integrated Transport Authority/Public Transport Commission
- Consolidation
- The implementation of plans already decided upon
- The need for enforcement
- Local authority involvement (public transport plans and budget allocation)
- Increasing local authority's role in public transport planning to complement the Integrated Transport Authority/ Public Transport Commission

- **Session Panelist 3**
  Ir. Dr. Tai Tuck Leong, Managing Director, Perunding Trafik Klasik

According to him, a train/bus journey would entail three segments;
- *Access to Service* (home to train station/bus stop),
- *Mainline Journey* (using a train or bus to the next train station/bus stop)
- *Connectivity for Dispersal* (train station/bus stop to the work place).

Presently, the overall timing when using the bus services within the Klang Valley (from urban to suburban destinations and visa versa) is between one to two hours. Bus stops are generally overlooked or play a less an important role when public transport planning is concerned. Bus transportation particularly bus stops can play an important role in providing a seamless and integrated public transport network. Examples of bus stops located in Curitiba in Brazil, Nantes and Strasbourg in France and Zurich in Switzerland shows the emphasis of comfortable and sheltered bus stops located very close to bus and train service routes.

Accessibility between Malaysia rail and bus service routes leaves much to be desired. There is a need to be *'people orientated'* when public transport planning is being carried out in Malaysia. He said that development in Malaysia always gave emphasis to vehicle routes, buildings and other utilities and left out the pedestrian factor i.e. walkways but this is gradually changing. It is estimated that around 2.5 million people commute in and out of KL on a working day. Around 50 to 70% of these commuters walk to their destinations for the last segment of their journey.

He recommends the following in order to meet the goal for a seamless and integrated public transport network:
- A shortened journey time
- Accessibility to service
- Minimising transfer between destinations
- Reduce waiting times
- A smooth dispersal flow at destination
- Affordable cost of travel
- Common integrated ticketing system

- **Session Panelist 4**
  Mr. Moaz Yusuf Ahmad, Advisor, Association for the Improvement of Mass Transit – Klang Valley (TRANSIT)

Mr. Moaz presented his findings that concentrate on the stagnation and progress being experienced in enhancing Malaysia's public transport and how to move ahead in making it a reality. The goal of a seamless and integrated public transport network has been compounded by a number of significant problems being faced:
- Poor planning of transport, services & development
- Uncoordinated and incomplete planning

- Lack of timely investment in public transportation
- Overcrowding and network breakdown
- KTM Crisis (a shortage of trains while the number of commuters grows)
- Existing networks have significant missing links and are not properly integrated
- Many options for services i.e. buses that are deemed unreliable, inaccessible and inconvenient for many

On the aspect of organisation and regulation, the significant problems faced are:
- Lack of interest/authority/ability/willingness to enforce regulations
- Incomplete understanding of what public transport can offer to a community
- Focusing on the lower-income group that don't necessarily take public transport
- Operator driven competition does not help the public transportation industry
- Operators may sacrifice quality, service, mobility, safety, rights of workers, etc.

Progress has also been made in some areas such as the establishment of *RAPID Penang* where the number of users of the service is increasing. He recommends the following in order to meet the goal for a seamless and integrated public transport network:
- Parliamentary Select Committee
- Public Land Transport Commission
  - introducing and maintaining National Standards
  - integrated planning across Malaysia
- Local/Regional Public Transport Authorities
  - Regional and Local Planning
  - Control of routes, fares, assets
  - Operators under contract to provide services
- Encouraging and using public feedback

Session 3: Increasing Public Transport Utilisation – Addressing Key Concerns

- **Session Overview by Chairperson**
  Mr. Muhammad Sha'ani bin Abdullah, Secretary-General, FOMCA

The availability and improvement of public transportation should be looked upon as a consumer right of citizens. Unfortunately, citizens tend to suffer from the uncoordinated, ill planned and profit driven public transport projects that have been developed by private concerns. An example would be the failure to connect the LRT and Monorail lines in KL Sentral itself that brings about such inconvenience to would be users.

- **Session Panelist 1**
  Mr. Azhar Ahmad, Chief Executive Officer, RAPID Penang

'Sustainability' is the key word in increasing the utilisation of public transport and this is undertaken by finding out what the general public would like and making sure it is delivered and maintained. The growing success of RAPID Penang has been brought about by its efficiency that encapsulates:
- Services (affordable, accessible, frequent, conducive, informative with well trained personnel)
- Enforcement (relevant authorities take responsibility for monitoring and issuing of licences)
- Hardware (vehicles with good levels of comfort, safety and cleanliness, GPS)
- Infrastructure (improved road system which includes bus lanes, developing/improving the bus terminals and bus & taxi stops)

According to him, the bus operations of most capital cities in developed countries have been reformed via the introduction of the *'Hub-and-Spoke'* concept which RAPID Penang will emulate once more infrastructure becomes available. The concept entails shortened travelling distances for buses that will increase their frequency and lower the waiting time despite the transfers. RAPID Penang plans to

increase the number of buses from 150 to 350 with the goal of achieving a 70:30 (private: public transportation) usage by 2010.

- **Session Panelist 2**

Mr. Goh Bok Yen, Director, Mag Technical and Development, Consultants Sdn Bhd

As much has been discussed and covered regarding the various problems being faced by Malaysia's public transport, he concentrated on short and long term recommendations to alleviate and eventually overcome these problems:

The short term steps:
- o Focusing on low/medium income groups and low vehicle ownership settlement corridors to achieve a higher modal split
- o Lower priority on high-income groups, low density and high vehicle ownership areas as these places would/can be more effectively served by taxis
- o Choosing suitable vehicles for feeder services with routes penetrating into densely populated settlements
- o Review and improving the facilities and amenities (bus stop design, waiting comfort, lighting, etc) on priority routes

The long term steps:
- o Policy and strategy in restraining private vehicle usage in the urban centre
- o Priority on bus operations and enforcement
- o Balancing land use planning and development

In Mr Goh's view, with all the research and recommendations garnered on the issue over the years there should be little or no room for trial and error.

- **Session Panelist 3**

Hj. Anuar bin Kassim, Director General, Department of Railways Malaysia

Hj. Anuar gave an introduction on Department of Railways (DOR) that reports to the Ministry of Transport and is governed by the Railways Act 1991 & Regulations. The duties & functions of the DOR are as follows:
- o Regulating railway operations and services
- o Prescribing minimal safety standards for railway operations
- o Prescribing registration/minimal qualification for railway officials
- o Promoting interest of users of railway facilities/ services (rates, standards, quality, etc)
- o Promoting expansion/improvement of railway systems/facilities/services

In his opinion on the matter on increasing public transport utilisation, there are several ways of achieving this. First and foremost, is to continuously expand the railway network as the *backbone* of public transport that is *complemented* with *adequate* bus line and bus feeder services. The availability of an integrated, accessible and seamless rail network is also needed that possesses a good level of capacity, comfort and reliability. Added to this, will be the need for a common ticketing system and increase in parking space for private vehicle users who would/wish to use public transport like the railway network.

Session 4: Engaging Technology in Public Transportation

- **Session Panelist 1**
  Mr. Tilo Franz, Director, Sales & Business Development, Asia Pacific System Division, Bombardier Transportation

In relation to the topic of discussion, Mr Franz presented Bombardier's achievement move to create an energy saving and environmentally friendly public transport system. The company is providing total train performance and solutions that encapsulates saving *E*nergy, improving *E*fficiency, achieving sound *E*conomic value and protecting the *E*cology (eco4). Among the features Eco4 has to offer are:

- EBI Drive 50 (driver assistance system)
- AeroEfficient (tool for optimised train designing)
- *FLEXX* Tronic (intelligent and active train bogie)
- MITRAC Permanent Magnet Motor (of very high power density)
- C.L.E.A.N. Diesel Power Pack (reducing the particle emissions and NOx footprint)

- **Session Chairperson & Panelist 2**
  Mr Axel Muench, Senior Vice President, Mobility Division, Siemens Malaysia

In applying technology to the public transportation system, Siemens envisions providing a system that people really want to use and not because they is no other alternative. With this goal in mind, technology was presented in three ways which consisted of:

- Using information technology to improve transport management
- Transportation systems advancements
- Smart card technology and integrated ticketing interface

In the discussion that follow, both Mr. Tilo Franz and Mr Axel Muench strongly advise that the initial planning stages must be well thought out otherwise the end result will lead to the same problems now being faced.

Session 5: Investing in Public Transportation

- **Session Panelist 1**
  Mr. Hilmy Zaini, President of Energy & Logistics Engineering Division, Scomi Group Bhd

The need for a seamless and integrated public transport network becomes more apparent due to the rapid growth and increased urbanisation being experienced by Malaysia. Despite this, Malaysia has experienced a slow decline *(16% in 2009 from 35% in 1980)* in the usage of public transportation due to reasons that have been already discussed. As with the desire to improve the nation's public transport network like the rail system comes the issue of investment. There are three options to consider when tackling this issue:

- **Purchase** which is a traditional approach involving the Government
- **Privatisation** which involves private concerns
- **Public Private Partnership (3P)** which involves both public and private concerns

With regards to 3P, the risks are shared out between the public and private bodies involved. The private sector for example, covers issues of cost of project, timeliness of construction, on-budget delivery and quality of services. The public sector on the other hand, covers environmental clearance, right of way or land acquisition, public acceptance and ridership volatility. The 3P has been used in various fields around the world like education, waste management, housing, hospital and defence as well.

In investing in Malaysia's public transportation, there is a need to have alternative financing options between the two extremes of privatization and public ownership. Should the 3P model be adopted, it must have win-win terms. There is a need for institutional changes and working together towards a paradigm shift in financing rail projects in Malaysia.

- **Session Panelist 2**
  Mr. Mark Streeting, Principal, Global Transport Practice, Booz & Company

He gave an Australian perspective in infrastructure funding for public transport where the *state governments* of that country were quick to embrace the *3P* option. This was due to the fact that the option provided several benefits such as:

- Ability to deliver more infrastructure projects
- Protect Government credit ratings
- Projects delivered at no or reduced cost to government
- Major risks transferred to private sector (such as patronage & construction)
- Operations and maintenance bundled up within the contract (by reducing the strain on existing resources)
- Significantly reduced cost overruns

A project using the 3P option was predominantly based on commercial principles where financial risk could be more easily transferred to the private sector. However, the commercial structure of these projects often caused inequitable risk allocation relative to returns. For example, the Sydney Airport Link rail service had resulted in the state government facing constant financial claims from the operator due to poor service performance. The failure of projects like the Sydney Airport Link rail service has made investors more cautious and created bad publicity for the government. As a safety measure, the Australian government is reviewing the project evaluation framework and financing arrangements applied to 3P projects.

- **Session Chairperson & Panelist 3**
  Pn. Zooridah Haron, Group Director, Corporate Services Division, Syarikat Prasarana Negara Berhad

In her view, the need for public transportation is to provide low cost mobility that is reliable and regular for those who wish to use it. The company is currently concentrating on two modes of public transportation which is the bus and rail service that require immediate attention. For example, Prasarana will be investing a total of RM7billion extensions to the light rail transportation (LRT) lines (Kelana Jaya & Ampang) while improving all aspects of the bus services.

While developing public transport is one matter, sustainability of financing happens to be an important question to be addressed. Whilst operators' concern is more of short term financial sustainability (capex, business cycle), Prasarana looks more at the long term viability.

Due to the nature of public transport, the task of financing it is met specific challenges such as:

- High expectations from the public
- High Capex investment
- High depreciation (as a result of the investment)
- High Capex maintenance
- High financing cost
- High staff turnover

And the above are unevenly matched by:

- Low farebox
- Low funding availability
- Low salaries and compensations for staff

However she also mentioned that there are several other financing methods that have yet been fully explored as most of the current financing is done through the issuance of bonds. Some of the financing methods mentioned are PPP and REITS.

Pn Zooridah also quoted the example of Singapore and Hong Kong who both have viable public transport systems. Singapore's utilises its traffic congestion charges to finance their public transport while Hong Kong has huge land banks that they have developed and generating revenues. These are untapped sources that Malaysia can consider.

Also in Singapore, they have gone into human capital training. They are now exporting their human capital skills and expertise in public transport to Dubai. This is an area that can create business opportunities for the public transport industry if we are able to offer services in areas such as rail & bus operations consultancy, safety & security enhancements, merger & acquisition and contract specialists and so on.

***** End of Summit *****